Draft for Public Review

ENVIRONMENTAL ASSESSMENT/ REGULATORY IMPACT REVIEW/ INITIAL REGULATORY FLEXIBILITY ANALYSIS

for a Proposed Amendment to Regulations Implementing the Fishery Management Plan for the Groundfish Fisheries of the Bering Sea and Aleutian Islands Area and the Fishery Management Plan for Groundfish of the Gulf of Alaska

Proposed Trailing Steller Sea Lion Amendments
to Change the Management of the Aleutian Islands pollock Fishery
and to
Exempt Pacific cod Vessels using Pot Gear From Two Haulout Protection Areas
in the Gulf of Alaska

Date: May 8, 2002

Lead Agency: National Marine Fisheries Service

Alaska Regional Office

Juneau, Alaska

Responsible Official: Jim Balsiger, Alaska Regional Administrator

For More

Information contact: Ben Muse, National Marine Fisheries Service

Susan Salveson, National Marine Fisheries Service Melanie Brown, National Marine Fisheries Service

Abstract: This Environmental Assessment/Regulatory Impact Review/Initial Regulatory

Flexibility Analysis (EA/RIR/IRFA) considers two changes to Steller sea lion protection measures adopted by the North Pacific Fisheries Management Council in October 2001. Five alternatives are reviewed. Three of these are alternatives for the management of the Aleutian Islands pollock fishery, and two of these are alternatives for the management of Pacific cod pot fishing at two haulouts in the Gulf of Alaska. This EA/RIR/IRFA meets the requirements of the National Environmental Policy Act, Presidential Executive Order 12866, and the

Regulatory Flexibility Act.

EXECUTIVE SUMMARY

Introduction

This EA/RIR/IRFA assesses the likely impacts of changing existing restrictions on the Aleutian Islands pollock fishery and modification of the Steller sea lion (SSL) protection measures around Caton Island and Cape Barnabas in the Gulf of Alaska (GOA) to mirror changes by the Alaska State Board of Fish (BOF). Without taking action for the Aleutian Islands pollock fishery, the current closure of this fishery would sunset on January 1, 2003, and the fishery would be authorized outside critical habitat with a 40/60 seasonal apportionment of total allowable catch (TAC). The Council intends to reconsider the allowance for an Aleutian Islands pollock fishery under a range of alternatives. Council response to the BOF action is important because federal and State regulations concerning Steller sea lion protection areas currently are in conflict.

Environmental Assessment

The objectives of this action are to provide for access to fisheries while: (1) maintaining protection for the western distinct population segment (DPS) of Steller sea lions (i.e., avoid jeopardy to the western DPS of Steller sea lions or result in the destruction or adverse modification of its critical habitat), (2) avoid unnecessary burdens on the fishing industry, and (3) avoid confusion and regulatory compliance issues by facilitating consistency between federal and state regulations. Any changes to the pollock, Pacific cod, or Atka mackerel fisheries must not erode Steller sea lion protection measures in order to provide economic benefits to the fishing industry without having reasonable mitigation measures such as other closure areas.

Alternatives 1-3 deal with the Aleutian Islands pollock fishery, while Alternatives 4 and 5 deal with Pacific cod pot fishing in the Gulf of Alaska. Alternatives 1-3 are mutually exclusive, as are Alternatives 4 and 5. However, either one of Alternatives 1-3 may be chosen in combination with either Alternative 4 or 5.

Alternative 1. No action alternative for the Aleutian Islands pollock fishery. Under this alternative, the Council's October 2001 recommendation to allow a directed fishery for pollock outside SSL critical habitat in 2003 and beyond would be implemented. The Aleutian Island total allowable catch (TAC) would be apportioned as follows: 40% to the A season and 60% to the B season.

Alternative 2. Continue to prohibit a directed fishery for pollock in the Aleutian Islands Subarea in 2003 and beyond. A directed fishery for pollock in the Aleutian Islands subarea has been prohibited since 1999.

Alternative 3. Similar to the no action alternative, allow a directed fishery for Aleutian Islands area pollock outside critical habitat. However, the annual TAC would not be seasonally apportioned, thus allowing for the full TAC to be harvested at anytime during the fishing year (likely in the winter time period).

Alternative 4. No action alternative for GOA haulouts. Federally permitted vessels using pot gear for Pacific cod directed fishing would continue to be prohibited from fishing within 3 nm of the Caton Island and Cape Barnabas haulouts.

Alternative 5. Allow federally permitted vessels using pot gear in a directed fishery for Pacific cod to fish within 3 nm of the Caton Island and Cape Barnabas haulouts. This action would provide consistency between federal and state regulations governing fishing restrictions within Steller seas lion protection areas.

NMFS has determined through the Steller sea lion protection measures supplemental environmental impact statement (SSL SEIS) (NMFS 2001a), the associated draft and final biological opinions, and subsequent informal consultation on the BOF action that the implementation of Alternatives 1 or 2, and 4 or 5 would fall under the umbrella of actions that have already been analyzed and comport with both the ESA and NEPA. Further analyses are not warranted. With the exception of Alternative 3, the alternatives considered in this EA would have incremental effects that are sufficiently minor on the spatial and temporal harvest of pollock, Pacific cod, or other groundfish so as to not deviate from the conclusions of the cumulative impact assessment presented in the SSL SEIS.

However, Alternative 3 falls outside of the scope of both the SSL SEIS and the associated biological opinion. NMFS has initially determined that this action may result in adverse effects to Steller sea lions not previously considered and would trigger formal consultation under the ESA. Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. If consultation resulted in a jeopardy or adverse modification determination, a mitigating reasonable and prudent alternative (RPA) would be included as required under the ESA. Such an RPA could be a seasonal apportionment of TAC as already adopted under the no action alternative (Alternative 1). Assuming these mitigating measures, neither the state nor federal fisheries would be likely to cause cumulative effects beyond those described in the SSL SEIS.

Regulatory Impact Review

Alternative 1 is the status quo/no action/baseline alternative. This would allow pollock fishing outside of critical habitat in the Aleutians Islands area. Fishing would be subject to a seasonal restriction - 40% of the TAC could be taken from January 20 to June 10, and 60% of the TAC could be taken between June 10 and November 1. Since this is the baseline alternative, impacts on the resource, benefits, and costs were not estimated separately for this alternative. The impacts on the resource, benefits and costs of Alternatives 2 and 3 were measured as differences from Alternative 1. Alternative 1 would not jeopardize the continued existence of the Steller sea lions or adversely modify critical habitat. It would not reduce the burden on the industry. This alternative would not trigger E.O. 12866 significance criteria.

Alternative 2 would close the directed pollock fishery in the Aleutian Islands. This would reduce the pollock harvest in the Aleutians, although harvests of pollock in the Bering Sea, or of other species in the Bering Sea and Aleutian Islands, might increase. The reduction in the harvest in the Aleutians may benefit the Steller sea lions there, however the benefits, if any, are likely to be small. There is no jeopardy or adverse modification now under the status quo. Moreover, the reduction may be offset by an increase in the harvest of another species in the BSAI, and this may offset the benefits. Total costs of a shutdown could reach \$16 million - the value of the TAC if fully taken under Alternative 1. However, costs are unlikely to be this high since they may be offset by increased harvests of pollock or other species elsewhere, and because, given critical habitat and seasonal limits on harvests under Alternative 1, fishermen might have trouble harvesting the full TAC. This alternative would not meet the program

objectives of reducing the burden on the industry and may not bring about any change in protection to Steller sea lions. This Alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$16 million at the outside.

Alternative 3 would permit fishing for pollock outside of critical habitat and would lift the seasonal constraint on this fishing. Under this alternative, harvest is likely to become concentrated in the first part of the year. This would have a benefit to the industry because pollock have more value at that time. This benefit may be as large as \$5.9 million. On the other hand, Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a temporal dispersion of catch outside critical habitat. Implementation of this action would likely result in a reinitiation of formal section 7 consultation under the ESA. If any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA. Alternative 3 would achieve the objective of relieving the burden on the fishermen, but as noted, it might contribute to jeopardy and adverse modification. This alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$5.9 million at the outside.

Alternative 4 is the status quo/no action/baseline alternative for GOA haulout restrictions. Under this alternative, Pacific cod pot fishermen in the GOA could not fish within three nautical miles of haulouts at Caton Island and Cape Barnabas. Since this is the baseline alternative, impacts on the resource, benefits, and costs were not estimated separately for this alternative. The impacts on the resource, benefits and costs of Alternative 5 were measured as a difference from Alternative 4. This alternative would not jeopardize the continued existence of the Steller sea lions or adversely modify critical habitat. It would not reduce the burden on the industry. This alternative would not trigger E.O. 12866 significance criteria.

Alternative 5 would allow federally permitted vessels used to participate in the GOA Pacific cod pot fishery to fish within three nautical miles of the haulouts at Caton Island and Cape Barnabas. This would reduce the Pacific cod revenues placed "at risk" by the restrictions of Alternative 4 by up to \$63,000. This in fact overstates the likely size of the net benefits, because the areas in question are small parts of larger fishing areas, and fishermen may currently be making up a large part of the harvest foreclosed by the restrictions by fishing elsewhere. Alternative 5 is not believed to create jeopardy for the Steller sea lions or adversely modify its critical habitat. This alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$63,000 at the outside.

Initial Regulatory Flexibility Analysis

Alternatives 1 through 3 affect the Aleutian Islands pollock fishery. Many of the entities in this area have gross revenues large enough to make them large entities, or are affiliated with other entities (such as processors or AFA fishing cooperatives) that do. It was estimated that, of 140 entities, 12 were small. The small entities included one AFA catcher vessel delivering to a mothership only, five AFA catcher vessels delivering to catcher/processors, and six CDQ groups. Alternatives 4 and 5 affect Pacific cod pot vessels fishing within three miles of Caton Island and Cape Barnabas during the State's parallel groundfish fishery. It was estimated that there were six of these, and that they were all small for RFA purposes.

Aleutian Islands pollock Alternative 2 may adversely impact six catcher vessels and six CDQ groups in comparison with the "status quo/baseline/no action" Alternative 1. However, at its greatest, the Aleutian

TAC would be very small compared to the Eastern Bering Sea TAC, fishing operations precluded from fishing within critical habitat may not be able to harvest a large part of it if it is available, and closure of directed fishing may be offset by increased pollock TACs elsewhere. However, without more information on how the TAC freed up by eliminating directed pollock fishing in the Aleutians would be used under the BSAI optimal yield (OY) ceiling, it is impossible to know for sure if Alternative 2 would have a significant impact on small entities. If an adverse impact results, it likely would be small.

Aleutian Islands pollock Alternative 3 has no adverse impacts on small entities in comparison with the "status quo/baseline/no action" Alternative 1. Alternative 3 lifts seasonal restrictions on trawl fishing for pollock in the Aleutian Islands and is expected to result in the pollock harvest being taken during the high valued winter fishery.

The Caton Island/Cape Barnabas Alternative 5 has no adverse impacts on small entities in comparison with "status quo/baseline/no action" Alternative 4. Alternative 5 lifts restrictions on fishing with pots for Pacific cod and provides small entities somewhat more flexibility. It is not clear if lifting the restrictions will increase revenues or reduce costs for these operations significantly. These operations have other inshore areas nearby - including within the same State of Alaska statistical reporting areas - within which they could fish. The volumes of fish taken from these areas in the past are modest compared to overall harvests from other Alaska inshore waters in those areas.

The EA/RIR/IRFA analyzed two options that may be less burdensome for directly regulated small entities in the Aleutian Island pollock fishery. Under Alternative 3 the seasonal restriction on harvests from the pollock fishery would be lifted, and it is likely that almost all of the harvest would be taken in the first half of the year, and probably in February and March when the roe quality is highest. While this would increase the value of the TAC for the industry, it would increase the concentration of the fishery in time. This may impose important costs if it jeopardizes the continued survival of the western DPS of Steller sea lions. As noted in Section 2.8 of this EA/RIR/IRFA,

"Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA ... if any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA "

Alternative 5 might be less burdensome for some small Pacific cod pot fishing vessels in the Gulf of Alaska. These would have somewhat more area to fish in during the State parallel fishery.

TABLE OF CONTENTS

EXE	CUTIVE	E SUMMARY	ii
TAB	LE OF C	CONTENTS	vi
LIST	OF TAI	BLES	viii
LIST	OF FIG	GURES	viii
1.0	INTR	RODUCTION	1
2.0	ENV	IRONMENTAL ASSESSMENT	2
	2.1	Introduction	
	2.2	Purpose and need for the action	
	2.3	Related NEPA Documents	
	2.4	Description of the Fisheries	
	2.5	Description of the Alternatives	
	2.6	Affected Environment	
	2.7	Environmental and Socio-economic Impacts of the Alternatives	9
	2.8	Cumulative Effects	
	2.9	Conclusions	16
3.0	REG	ULATORY IMPACT REVIEW	20
	3.1	Introduction	20
	3.2	What is a Regulatory Impact Review?	20
	3.3	Statutory authority	21
	3.4	Purpose and need for action	21
	3.5	Alternatives considered	23
	3.6	Description of fishery	23
	3.7	Summary of the benefits and costs	29
	3.8	Benefits of the alternatives	31
	3.9	Costs of the alternatives	34
	3.10	Summary of the significance criteria	35
4.0	INITI	IAL REGULATORY FLEXIBILITY ANALYSIS	36
	4.1	Introduction	36
	4.2	The purpose of an IRFA	37
	4.3	What is required in an IRFA?	
	4.4	What is a small entity?	38
	4.5	What is this action?	
	4.6	Reason for considering the proposed action	
	4.7	Objectives of, and legal basis for, the proposed action	
	4.8	Number and description of small entities affected by the proposed action	
	4.9	Adverse economic impacts on small entities	
	4.10	Recordkeeping and reporting requirements	
	4.11	Federal rules that may duplicate, overlap, or conflict with proposed action	
	4.12	Description of significant alternatives	43

5.0	REFERENCES	45
6.0	AUTHORS	47
7.0	CONSULTANTS AND CONTRIBUTORS	47
APPEN	NDIX 1 The Council's recommended Steller sea lion protection measures	48
APPEN	NDIX 2 ESA listed and candidate species that range into the BSAI or GOA groundfish management areas and whether Reinitiation of Section 7 Consultation is occurring	55

LIST OF TABLES

Table 1. Steller sea lion non-pup counts from summer and winter aerial surveys at Cape Barnabas and
Caton haulouts
Table 2. Estimated Pacific cod pot harvest within 3nm of the Caton Island and Cape Barnabas haulouts
in the State Parallel Fishery in 1999 and 2000
Table 3. Gross Revenues and Vessel Numbers in the GOA Pacific cod pot fishery
Table 4. Numbers of Pacific cod pot fishing vessels in the State of Alaska's South Peninsula and Kodiak
groundfish management areas during the parallel fisheries
Table 5. Caton Island and Cape Barnabas State parallel fishery harvests in pounds in 1999 and 2000 . 28
Table 6. Summary of the cost and benefit analysis for Aleutian Islands pollock restrictions 30
Table 7. Summary of the cost and benefit analysis for Caton Island and Cape Barnabas pot gear
restrictions
Table 8. Aleutian Islands pollock allocations under the three alternatives
Table 9. Numbers of large and small entities affected by the action
,
LIST OF FIGURES
Figure 1. Critical habitat for the depleted population segment of the Steller sea lion showing the 13 areas used to develop Steller Sea lion
protection measures
Figure 2. Geographic location of Caton Island and Cape Barnabas haulouts in the Gulf of Alaska 6
Figure 3. Metric tons of pollock caught in the Eastern Bering Sea and Aleutian Islands pollock fisheries,
1990-2001

1.0 INTRODUCTION

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone, which extends between 3 and 200 nautical miles from the baseline used to measure the territorial sea (federal waters). The management of these marine resources is vested in the Secretary of Commerce and in regional fishery management councils. Off Alaska, the North Pacific Fishery Management Council (Council) has the responsibility to prepare fishery management plans for the marine fisheries it finds that require conservation and management. The National Marine Fisheries Service (NMFS) is charged with carrying out the federal mandates of the Department of Commerce with regard to marine fish.

The groundfish fisheries in federal waters off Alaska are managed under the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands area and the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMPs). The Council prepared the FMPs under the authority of the Magnuson-Stevens Act, 16 U.S.C. 1801, et seq. Regulations governing U.S. fisheries and implementing the FMPs appear at 50 CFR parts 600 and 679. NMFS also has management responsibility for certain threatened and endangered species, including Steller sea lions, under the ESA of 1973, 16 U.S.C. 1531, et seq., and the authority to promulgate regulations to enforce provisions of the ESA to protect such species.

Actions taken to amend the FMPs or their implementing regulations must meet the requirements of federal laws and regulations. In additional to the Magnuson-Stevens Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, the Regulatory Flexibility Act (RFA) and the American Fisheries Act (AFA).

This environmental assessment/regulatory impact review/initial regulatory flexibility analysis (EA/RIR/IRFA) is prepared in consideration of these federal laws and regulations. The purpose of this EA/RIR/IRFA is to reassesses Steller sea lion protection measures adopted by the Council in October 2001 to determine whether the proposed allowance for an Aleutian Islands pollock fishery in 2003 is appropriate in consideration of potential relief measures being considered by the Council for other vessel sectors fishing for Bering Sea and Aleutian Islands management area (BSAI) or Gulf of Alaska (GOA) pollock, Pacific cod, or Atka mackerel. The Council also requested staff to assess an Alaska State Board of Fish (BOF) action that declined to implement pot gear restrictions in State waters around two Steller sea lion (SSL) haulouts in the Gulf of Alaska.

This EA tiers off the Supplemental Environmental Impact Statement prepared by NMFS on the Steller sea lion protection measures in the Federal groundfish fisheries off Alaska (SSL SEIS)(NMFS 2001a). Under the ESA, a section 7 consultation resulted in a biological opinion (2001 BiOp) appended to the SSL SEIS which evaluated the impacts of the preferred alternative on ESA listed species. The SSL SEIS also included a regulatory impact review as required under E.O. 12866.

2.0 ENVIRONMENTAL ASSESSMENT

2.1 Introduction

At its October 2001 meeting, the Council recommended SSL protection measures for 2002 and beyond. These measures were developed by a Council-appointed committee (hereafter referred to as the SSL Committee, but was formerly called the "RPA Committee"). In developing its recommendations, the SSL Committee first assessed the needs of Steller sea lions to avoid jeopardy or destruction or adverse modification of their critical habitat based on the best scientific information available. The SSL Committee then crafted groundfish fisheries management measures that first provided protection for Steller sea lions. If some flexibility existed, the measures were crafted to meet national standards in the Magnuson-Stevens Act, as long as protection for Steller sea lions was maintained, as required by the ESA.

These recommendations included a revised harvest control rule for pollock, Pacific cod and Atka mackerel; closed areas and seasons based on the location, fishery, and gear type; critical habitat harvest limits for the pollock and Atka mackerel fisheries in certain areas of critical habitat; and requirements to allow for monitoring of pollock, Pacific cod and Atka mackerel directed fishing. The recommendations of the SSL Committee were further modified by the Council. The complete set of recommendations by the Council is detailed in Appendix 1.

NMFS formally consulted under section 7 of the ESA on the SSL protection measures. A biological opinion (2001 BiOp) was appended to the SSL SEIS which evaluated the effects of the preferred alternative on ESA listed species. The SSL SEIS also included an RIR. The agency determined in the BiOp that the protection measures proposed by the Council were not likely to jeopardize the continued existence of the western distinct population segment (DPS) of Steller sea lions or result in the destruction or adverse modification of its critical habitat. Based on this BiOp and the environmental impacts disclosed in the SSL SEIS, the Council adopted the preferred alternative (with modifications) and forwarded it to NMFS for approval and implementation. NMFS implemented the preferred alternative by emergency interim rule prior to the start of the 2002 fishing year (67 FR 956, January 8, 2002, amended 67 FR 21600, May 1, 2002). NMFS intends to implement these measures through proposed and final rulemaking in 2002, which would supercede the emergency rule.

At its October 2001 meeting, the Council also identified 8 individual actions that it requested to be analyzed by staff, for possible implementation in 2002, that would amend the SSL protection measures. These measures are intended to provide relief to specified segments of the fishing fleet and include:

- 1. Area 8 exemption for catcher vessels using hook-and-line gear to fish 3-10 nm;
- 2. Area 4 exemption for vessels \leq 60 ft using hook-and-line or pot gear in Chignik;
- 3. Stand down provisions between A/B and C/D seasons for Gulf of Alaska (GOA) pollock;
- 4. Exemption from Steller sea lion protection measures for all vessels < 60 ft;
- 5. Alternative seasonal splits for GOA Pacific cod;
- 6. Alternative critical habitat harvest limits for Atka mackerel in the Aleutians;
- 7. Alternative prohibitions on directed fishing for pollock in the Aleutian Islands; and
- 8. Alternative Pacific cod harvest limits in Area 9 for pot, hook-and-line and jig gear.

In order for the preferred alternative under the SSL SEIS to be fully implemented, the BOF would have had to enact parallel regulations providing for closures in State waters (0-3 nm) during the State parallel fishery (See section 2.7.1.2 for a definition of the parallel fishery). Therefore, in November 2001, the

BOF adopted a series of fishery closure areas (with some exceptions) which mirrored those areas requested by the Council under the SSL protection measures. The federal regulations (implementing the Council's preferred alternative) contained closures for Pacific cod fisheries using pot gear at Caton Island and Cape Barnabas (Kodiak) within 3 nm of those ESA listed haulouts. However, the BOF action did not contain these closures, weakening the SSL protection measures by allowing vessels without a federal fishing permit to fish in those areas under Alaska State law. This resulted in conflicting Federal and State regulations, as well as being different from the action that was consulted on under the ESA. In November, NMFS informally consulted on these changes and determined that they were not of sufficient extent to re-initiate formal consultation.¹

At its February 2002 meeting, the Council began discussions on the 8 "trailing amendments" with the addition of the changes required by the BOF action. NMFS staff expressed the agency's view that most of these proposals would erode (to some extent) the SSL protection measures implemented by emergency interim rule in 2002. NMFS has stated on the record that it sees erosion of these measures as a serious concern. Taken individually, any of the above changes might seem minimal. However, when taken together over a span of a few years, these measures might reach a cumulative impact level which could trigger jeopardy and/or adverse modification. Pending the conclusion of section 7 consultation, NMFS likely would require mitigation of these changes as they are implemented in order to avoid future cumulative impact problems and maintain a consistent level of protection for the western DPS of Steller sea lions.

Of the 8 proposals identified by the Council in October 2001, with the addition of the BOF action, three different classes of effects were described by NMFS at the February meeting:

- (1) Major adverse impacts: proposal 4 would likely result in a major adverse impact because it would remove Steller sea lion protection measures throughout the 13 management areas used to develop Steller sea protection measures, thus having a negative effect on the entire western DPS.
- (2) Moderate adverse impacts: proposals 3, 5, 6, and 7 likely would have moderate adverse effects given that they would relieve protection measures in as few as 2, but as many as 6 of the management areas.
- (3) Minor adverse impacts or previously considered actions: proposals 1, 2, 8 and the BOF action likely could have minor adverse effects (depending upon the suboptions chosen). Some of these actions have already been considered under the ESA such as the BOF action. These actions would only affect a single management area, and therefore would have smaller effects on the western DPS.

NMFS informed the Council at the February meeting that no new scientific analyses were necessary in order to consider extending the closure of Aleutian Islands pollock fishery beyond 2002 (item 7) and the BOF action on GOA haulouts, therefore, the Council requested that an analysis be developed immediately for an action to implement item 7 (restrictions on the Aleutian Islands pollock fishery) and the BOF action. These two measures are the subject of this EA. With the exception of proposal 4, the remaining measures are scheduled to be considered by the Council's SSL Committee this summer. The Council may adjust the participants on the SSL Committee to ensure adequate input from all the involved

¹December 11, 2001, memorandum from Michael Payne, Assistant Regional Administrator for Protected Resources to Susan Salveson, Assistant Regional Administrator for Sustainable Fisheries.

interest groups.

Figure 1 presents an overview of SSL critical habitat and the closure areas developed by NMFS and the Council for the BSAI and GOA. This includes 13 specified areas (1-13), used to manage fishery closure areas. Caton Island is located in Area 6 and Cape Barnabas (Kodiak) in Area 3 [BOF action], and the Aleutian Islands Pollock fishery in Areas 12 and 13 [proposal 7].

2.2 Purpose and need for the action

The purpose and need for this action and it's objective are as follows:

Need for the Proposed Action: The Council has requested an analysis that assesses the likely impacts of changing existing restrictions on the Aleutian Islands pollock fishery and modifying the SSL protection measures around Caton Island and Cape Barnabas to mirror the BOF changes. Without taking action for the Aleutian Islands pollock fishery, the current closure of this fishery would sunset on January 1, 2003, and the fishery would be authorized outside critical habitat with a 40/60 seasonal apportionment of total allowable catch (TAC). The Council intends to reconsider the allowance for an Aleutian Islands pollock fishery under a range of alternatives. Council response to the BOF action is important because federal and State regulations concerning Steller sea lion protection areas currently are in conflict.

Objectives: The objectives of this action are to provide for access to fisheries while: (1) maintaining protection for the western DPS of Steller sea lions (i.e., avoid jeopardy to the western DPS of Steller sea lions or result in the destruction or adverse modification of its critical habitat), (2) avoid unnecessary burdens on the fishing industry, and (3) avoid confusion and regulatory compliance issues by facilitating consistency between federal and state regulations. Any changes to the pollock, Pacific cod, or Atka mackerel fisheries must not erode Steller sea lion protection measures in order to provide economic benefits to the fishing industry without having reasonable mitigation measures such as other closure areas.

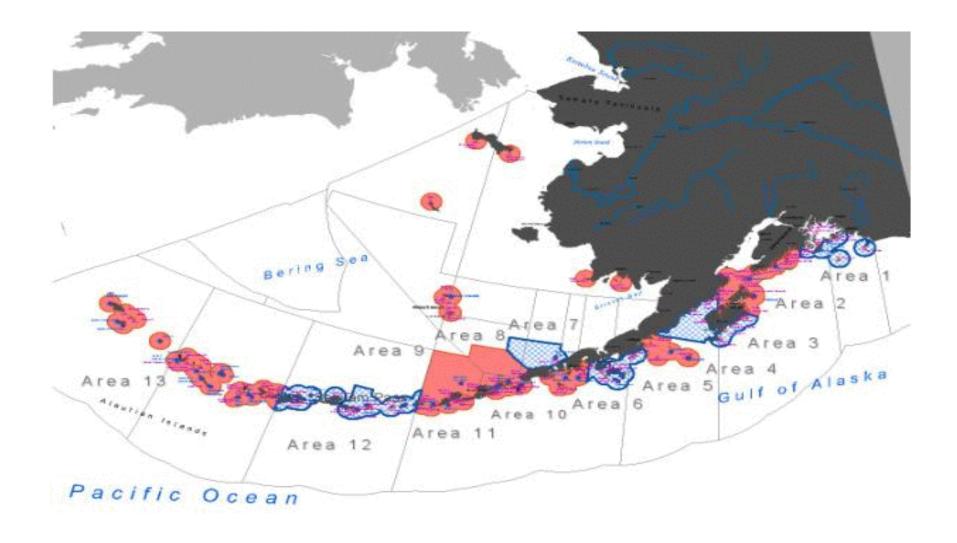


Figure 1. Critical habitat for the depleted population segment of the Steller sea lion showing the 13 areas used to develop Steller Sea lion protection measures

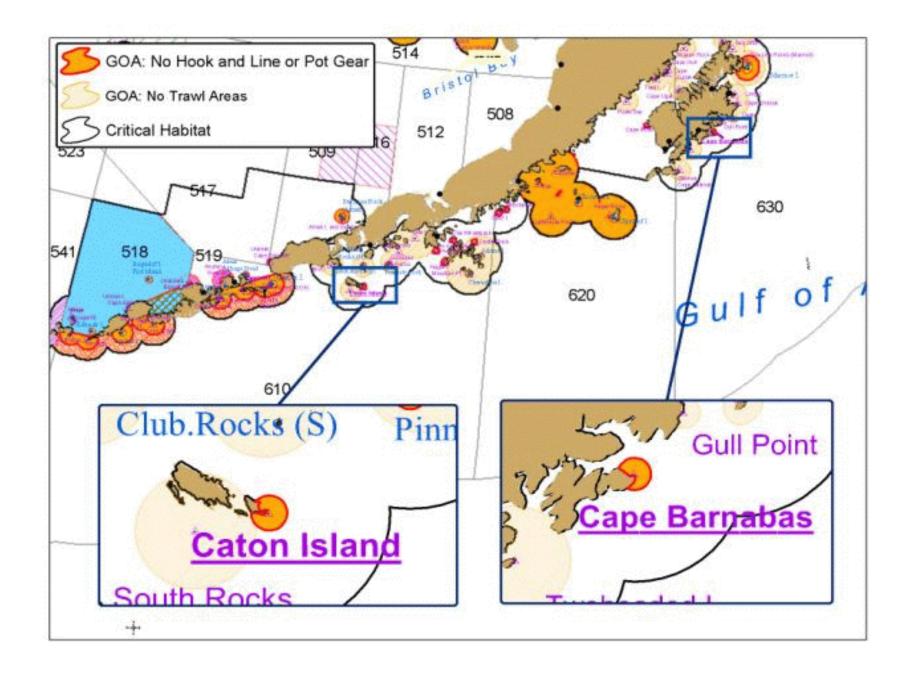


Figure 2. Geographic location of Caton Island and Cape Barnabas haulouts in the Gulf of Alaska

2.3 Related NEPA Documents

The original EISs for the BSAI and GOA FMPs were completed in 1981 and 1979, respectively. An additional draft programmatic SEIS has been prepared and circulated for public review and comments (NMFS 2001b). The analysis evaluates the BSAI and GOA groundfish FMPs in their entirety against policy level alternatives. The programmatic SEIS provides insight as to what environmental effects would result from other fisheries management regimes within an analytical framework. Findings of that analysis could result in FMP amendments that could lead to formal rulemaking and implementation of changes to the current management policy governing the groundfish fisheries off Alaska. The public comment period on the draft programmatic SEIS was from January 25, 2001, through July 25, 2001.

On November 27, 2001, NMFS announced its intent to revise the Alaska Groundfish Fisheries draft Programmatic SEIS. After reviewing more than 21,000 comment letters received on the draft Programmatic SEIS, NMFS determined that revisions to the draft Programmatic SEIS are appropriate and necessary. NMFS also determined that these revisions will require the release of a revised draft Programmatic SEIS. Based on these decisions, NMFS announced a new series of dates that extend into 2003 for preparing the revised draft, preparing the final programmatic SEIS, and issuing the Record of Decision.

A supplemental environmental impact statement was prepared in 2001 (NMFS 2001a) to evaluate modifications of fishery management measures to mitigate impacts on Steller sea lions. The purpose of that SEIS was to provide information on potential environmental impacts that could occur from implementing a suite of fishery management measures such that the existence of the western Steller sea lion DPS is not jeopardized nor its critical habitat adversely modified by the groundfish fisheries in the GOA and the BSAI. Fisheries management measures were designed to allow commercial groundfish fishing in the North Pacific while assuring that the fisheries would neither jeopardize the continued existence of Steller sea lions nor adversely affect their critical habitat. Alternative 4, the area and fishery specific approach, was selected as the preferred alternative. The modifications to fishery management measures encompassed in that alternative were enacted by emergency rule for the 2002 fishing year (67 FR 956, January 8, 2002, amended and corrected May 1, 2002, 67 FR 21600).

2.4 Description of the Fisheries

Detailed descriptions of the fisheries that are the subject of this analysis, i.e., the Aleutian Islands pollock fishery and the GOA pot gear fishery for Pacific cod, are contained in section 3.6 of this document. Descriptions of these and other groundfish fisheries also may be found in the following reports (all readily available in printed form or over the Internet at links given in the references):

Alaska Groundfish Fisheries. Draft Programmatic Supplemental Environmental Impact Statement (NMFS 2001b). This report contains detailed fishery descriptions and statistics in Section 3.10, "Social and Economic Conditions," and in its Appendix I, "Sector and Regional Profiles of the North Pacific Groundfish Fisheries."

"Economic Status of the Groundfish Fisheries off Alaska, 2000" (Hiatt *et al.* 2001). is also known as the "2001 Economic SAFE Report." This document is produced and updated each fall in the NMFS Alaska Fisheries Science Center. The 2001 edition contains 49 historical data tables summarizing a wide range of fishery information through the year 2000.

Steller Sea Lion Protection Measures Supplemental Environmental Impact Statement (NMFS 2001a) contains several sections with groundfish fishery descriptions focused on three species - pollock, Pacific cod, and Atka mackerel. Section 2.3 goes through a complete set of calculations for TAC by area, species, season, and gear using 2001 stock assessment to show what will result from the modifications to management measures to avoid jeopardy to Steller sea lions and adverse modification of critical habitat. Section 3.12.2 provides extensive background on existing social conditions, Appendix C provides extensive information on fishery economics, Appendix D provides extensive background information on groundfish markets, Appendix E documents harvest amounts and location by week throughout one fishing year.

Environmental Impact Statement for American Fisheries Act Amendments 61/61/13/8 (NMFS 2002) provides a survey of the Bering Sea and Aleutian Islands groundfish fishery paying particular attention to the pollock fishery and the management changes introduced into it following the American Fisheries Act. The fisheries information is contained in Section 3.3, "Features of the human environment."

2.5 Description of the Alternatives

Alternatives 1-3 are mutually exclusive, as are Alternatives 4 and 5. However, either one of Alternatives 1-3 may be chosen in combination with either Alternative 4 or 5.

2.5.1 Alternatives addressing the Aleutian Islands area pollock fishery

Alternative 1. No action alternative for the Aleutian Islands pollock fishery. Under this alternative, the Council's October 2001 recommendation to allow a directed fishery for pollock outside SSL critical habitat in 2003 and beyond would be implemented. The Aleutian Island TAC would be apportioned as follows: 40% to the A season and 60% to the B season.

Alternative 2. Continue to prohibit a directed fishery for pollock in the Aleutian Islands Subarea in 2003 and beyond. A directed fishery for pollock in the Aleutian Islands subarea has been prohibited since 1999.

Alternative 3. Similar to the no action alternative, allow a directed fishery for Aleutian Islands area pollock outside critical habitat. However, the annual TAC would not be seasonally apportioned, thus allowing for the full TAC to be harvested at anytime during the fishing year (likely in the winter time period).

2.5.2 Alternatives addressing Alaska State BOF action to exempt Pacific cod pot gear restrictions in two Gulf of Alaska SSL haulout protection areas

Alternative 4. No action alternative for GOA haulouts. Federally permitted vessels using pot gear for Pacific cod directed fishing would continue to be prohibited from fishing within 3 nm of the Caton Island and Cape Barnabas haulouts.

Alternative 5. Allow federally permitted vessels using pot gear in a directed fishery for Pacific cod to fish within 3 nm of the Caton Island and Cape Barnabas haulouts. This action would provide consistency between federal and state regulations governing fishing restrictions within Steller seas lion protection areas.

2.6 Affected Environment

The other NEPA documents listed in section 2.3 contain extensive information on the fishery management areas, marine resources, ecosystem, social and economic parameters of the pollock, Pacific cod and other groundfish fisheries. Rather than duplicate an affected environment description here, readers are referred to those documents, particularly section 3 of the SSL SEIS (NMFS 2001a).

2.7 Environmental and Socio-economic Impacts of the Alternatives

2.7.1 Environmental impacts of the alternatives

Other than the western DPS of Steller sea lions, none of the alternatives would be expected to have any effect on the environment, or species listed under the ESA, that has not previously been considered in the SSL SEIS and associated Section 7 consultations. Appendix 2 shows ESA listed and candidate species that range into the BSAI or GOA groundfish management areas and whether Reinitiation of Section 7 Consultation is ongoing or would be required under any of the alternatives considered in this EA. Alternatives 1 and 2 were addressed in the SSL SEIS and considered in the accompanying biological opinion (NMFS 2001a). Thus, the analysis of direct, indirect, and cumulative effects of these alternatives on the environment are fully described in the SSL SEIS; no new information exists that would alter the determinations and conclusions in the SSL SEIS. These effects are summarized in the executive summary of the SSL SEIS, and treated in detail in Chapter 4.13.

Alternatives 3 through 5 were not specifically considered. With respect to fisheries and the physical and biological environment, the effects of these proposed activities would be imperceptibly small so as not to result in additional environmental effects beyond those already presented in the SSL SEIS. The possible effects on the western DPS of Steller sea lions which are likely to result from the implementation of these alternatives are discussed below.

2.7.1.1 <u>Aleutian Islands Pollock Fishery</u>

The description of the Aleutian Islands pollock fishery in section 3.6 of this analysis notes that this fishery has been prohibited since 1999. However, during the four years leading up to the fishery prohibition, typical fishery operations included harvest of nearly all of the total allowable catch within a several week period during the roe, or winter season. Further, most of this harvest occurred within SSL critical habitat.

Originally, closure of the Aleutian Islands Subarea to fishing for pollock was not mandated by NMFS' December 3, 1998 biological opinion (NMFS 1998a) as necessary for the protection of Steller sea lions. That BiOp contained a set of reasonable and prudent alternatives which provided a framework to avoid the likelihood of jeopardizing Steller sea lions or adversely modifying their critical habitat. This framework provided the Council some flexibility to develop specific management measures for the pollock fishery. The framework from the RPAs used three main principles: (1) preclude fisheries

competition for prey resources around rookeries and major haulouts, (2) disperse fisheries temporally to minimize the likelihood of locally-depleting the pollock resource, and (3) disperse the fisheries spatially to further minimize the likelihood of locally depleting pollock. Based on these principles, the Council provided recommendations for management measures at its December 1998 meeting that included closure of the pollock fishery in the Aleutian Islands subarea. NMFS incorporated these recommendations, including the closure of the Aleutian Islands pollock fishery, into the RPAs for the final 1998 biological opinion (NMFS 1998b) and into an emergency rule regulating the fisheries in 1999. The Aleutian Islands subarea has remained closed to the pollock fishery since then.

In the draft biological opinion prepared on the preferred alternative in the draft SSL SEIS (August 2001), a draft finding of no jeopardy or adverse modification was found for the proposed action at that time, which included an Aleutian Islands pollock fishery outside of critical habitat (NMFS 2001c). This was considered by NMFS to have a negligible impact on Steller sea lions through indirect (i.e., competitive) mechanisms. In October 2001, the Council revised the proposed action and recommended that the Aleutian Islands pollock fishery be closed in 2002 and then be opened again in 2003 with restrictions. In 2003 and beyond, the fishery would be limited to operating outside critical habitat and TAC would be seasonally apportioned 40/60 into two seasons.

NMFS prepared a final biological opinion on the modified Steller sea lion protection measures (NMFS 2001a, Appendix A) and resulted in a finding of no jeopardy or adverse modification of critical habitat. NMFS did not accrue any additional conservation benefits to Steller sea lions by the closure of the AI pollock fishery in 2002. Because NMFS considers a dispersed fishery outside of critical habitat to have negligible impacts to Steller sea lions (via competitive interactions for prey), a total closure would have only marginal increased benefits to Steller sea lions. Closure of the Aleutian Islands subarea certainly is a more risk-averse approach to sea lion conservation, but as a rule, NMFS does not see this as a necessary tool in supporting the survival and recovery of the species. Furthermore, closures outside of critical habitat, although more beneficial for sea lions, can not be used as mitigative measures to allow more fishing inside of Steller sea lion critical habitat. Therefore, Alternatives 1 and 2 are roughly equally protective of the western DPS of Steller sea lions.

Alternative 3 is likely to result in a perceptible adverse change to the existing conservation package for Steller sea lions. The result of having no seasonal restrictions would be a concentrated fishery in the winter period, which is the season of most concern regarding the possible effects of prey depletions for foraging juvenile sea lions and lactating females (NMFS 2001a). A concentrated winter fishery for pollock is likely to have adverse affects on foraging Steller sea lions because they are known to do a significant amount of foraging outside of critical habitat in the winter months (NMFS 2001a, Table 5.1a and 5.1b). A proposed action that included this alternative would not be considered viable by NMFS. Therefore, if this alternative was forwarded to NMFS it would trigger re-consultation under the ESA. It is likely, without any mitigating factors, that a consultation would result in a jeopardy determination based on seasonal concentration. Because this fishery would be authorized only outside of critical habitat, adverse modification of critical habitat is not likely to be an issue. From initial informal consultation discussions, Alternatives 1 or 2 provide reasonable alternatives to Alternative 3.

Table 8 in section 3.8 of this analysis summarizes the potential differences in temporal dispersion of harvest of Aleutian Islands pollock under Alternatives 1-3 by different pollock fishing sectors. A continued prohibition on a directed fishery for pollock in the Aleutians (Alternative 2) would have an unknown net impact on SSL given that the resulting reduced harvest amounts of pollock in the Aleutian

Islands could be offset by an increase in the harvest of another species so that overall TAC for BSAI groundfish remains at the specified optimum yield level of 2 million mt.

2.7.1.2 BOF action to exempt Pacific cod pot gear vessels from specified GOA protection areas

The Council proposed an action that assumed that identical protection measures would be implemented in State managed waters during the parallel fisheries for pollock, Pacific cod and Atka mackerel. The term "parallel groundfish fishery" is defined as the Pacific cod, walleye pollock, and Atka mackerel fisheries in State waters opened by the Commissioner of the Alaska Department of Fish and Game (ADF&G), under emergency order authority to correspond with the times, area, and unless otherwise specified, the gear of the federal season in adjacent federal waters (Alaska Administrative code 5 AAC 28.087(c), January 3, 2002). In a parallel fishery, harvest in State waters is credited against the federal total allowable catch (TAC) amount specified for that species. The parallel fishery does not include fishing for groundfish in State waters under a separate State-managed guideline harvest level.

At its November 13-14 meeting, the BOF reviewed the Council's recommendation for Steller sea lion protection measures. These measures generally consist of fishery or gear specific directed fishing closures within 3, 10, or 20 nautical miles (nm) of Steller sea lion rookeries or haulouts. NMFS and the Council expected that the BOF would mirror these regulations in State waters during the parallel fisheries for pollock, Atka mackerel and Pacific cod. This is necessary to implement the protection measures that included fishery prohibitions that extended into State waters.

The BOF responded by authorizing the Commissioner of the ADF&G, through emergency order, to open and close seasons and areas as necessary to mirror federal regulations for the purpose of protecting Steller sea lions. However, the BOF did provide two exemptions for vessels fishing for Pacific cod with pot gear around the Caton Island and Cape Barnabas haulouts (discussed further below). In addition, the BOF changed the opening date of the State managed Chignik Pacific cod jig and pot gear fishery to provide access to a fishery in the winter that had been closed by the Council's proposed action. The BOF exemptions, as well as ADF&G authority to mirror federal protection measures in State waters, sunset at the end of 2002. The BOF intends to revisit this issue in 2002 in order to evaluate any new information and to allow coordination with the Council if any changes in the federal protection measures are proposed for 2003.

The two exceptions in the parallel fishery would allow directed fishing for Pacific cod with pot gear between 0-3 nm of the Caton Island and Cape Barnabas haulouts (Figure 2). The proposed action recommended by the Council, and assessed in the 2001 BiOp, closed 0-3 nm to all gear types except vessels using jig gear. Thus, the BOF action authorizes pot gear fishing within 0-3 nm of two haulouts that was not considered or assessed in the 2001 BiOp.

The rationale stated by the BOF for this discrepancy was that few animals have been seen at these two sites over the last decade (Table 1); these sites are haulouts instead of rookeries; and that other sites in the region would remain closed to pot gear fishing inside 3 nm of haulouts. Hook-and-line gear was not included in the exemption because this gear type is not authorized in the State-managed Pacific cod fishery.

Table 1. Steller sea lion non-pup counts from summer and winter aerial surveys at Cape Barnabas and Caton haulouts.

	Cape Ba	arnabas	Caton		
Year	Summer Winter		Summer	Winter	
1957	1598				
1976	364				
1985	107				
1986	44		847		
1989	0		0		
1990	1				
1991	0				
1992	1		0		
1993		0			
1994	0	124			
1996	0				
1997	0		0		
1998	0				
1999		30		0	
2000	0		257		

Table 2 shows the amounts of Pacific cod harvested near Caton Island and Cape Barnabas in 1999 and 2000. This information is based on fish ticket data and assumes that the harvest of fish in a statistical area is evenly dispersed in the area. It is likely that harvest is not evenly dispersed in a statistical area (as assumed by this analysis) and more or less harvest may come from the 0-3 nm areas around these haulouts. All of the pot harvest in the state parallel fishery around these haulouts is from vessels less than 60 feet LOA.

Table 2. Estimated Pacific cod pot harvest within 3nm of the Caton Island and Cape Barnabas haulouts in the State Parallel Fishery in 1999 and 2000

	1999	2000
Haulouts	Amount in mt	Amount in mt
Western and Central area combined TACs	66,565	54,705
Caton Island and Cape Barnabas	42	18

Note: The estimated harvests for Caton Island and Cape Barnabas have been aggregated, even though these areas are relatively widely separated, in order to protect data confidentiality. TAC specifications obtained from NMFS Alaska Region web page: http://www.fakr.noaa.gov/sustainablefisheries/catchstats.htm.

These data suggest that the expected catch amounts are relatively small when compared to the Gulf of Alaska TACs. Total harvests were estimated to be 42 metric tons in 1999, compared to a TAC of 66,565 metric tons, and a catch of 18 metric tons in 2000, compared to a TAC of 54,705 metric tons. This is roughly 0.06% of the TAC. Because these areas are adjacent to other haulouts which have no fishery prohibitions, effort is not expected to increase in this two haulouts beyond the historical amounts. Further, section 5.3.1.6 of the 2001 BiOp (NMFS 2001a) indicated that pot gear removals typically do not reflect high catch rates (compared to trawl), and are unlikely to affect patches of sea lion prey similar to trawl gear. Under this scenario, fishing is likely to occur close to the shore of these haulouts, but at a relatively low harvest rate by gear types that are less likely to result in localized depletions that would adversely affect a foraging Steller sea lion. Furthermore, recent surveys of these haulouts has shown them to be minor haulouts, with sporadic usage. Therefore, these exemptions should have minimal effects on Steller sea lions.

Questions have been posed about the projected catch by pot vessels within 3 nm of Caton Island and Cape Barnabas as a proportion of the fish available to be caught near each area. The question is whether adequate forage exists within critical habitat, or portions thereof, to support Steller sea lions and commercial fishing operations, even operations as minimal as the Caton Island and Cape Barnabas pot gear fisheries. This issue generally was explored in the 2001 BiOp and no new information is available from that already devoted to this question in section 5.3 of the BiOp. Although attempts have been made to compare the ratio of biomass consumed by Steller sea lions to the biomass of groundfish available within critical habitat (section 5.3.3 of the 2001 BiOp), the spatial scale of such forage ratio analyses are too large to be applicable to specific haulouts; data are not available on a spatial or temporal scale that would allow further refinement of this approach in a manner that would make it useful for analysis of the BOF pot gear exemptions considered in this EA.

However, NMFS is considering the effects of fisheries on Steller sea lions based on the overall effects on the western population. This approach is due to the fact that no available information exists on prey biomass at scales related to individual rookeries and haulouts. Of the twelve haulouts in the area around Kodiak Island, only two were closed to pot gear out to 3 nm under the 2002 protection measures. The proposed action would open one of the two closure areas (Cape Barnabas). Clearly, the cumulative impact of opening the additional haulout is very small given that most of the area around haulouts is currently open to pot fisheries. The reasoning for reduced closure areas for pot, jig, and longline gear as opposed to trawl gear is provided in the 2001 BiOp

(NMFS 2001a). The opening of the Caton Island and Cape Barnabas haulouts to fishing with pot gear would affect the population trajectory index used in the development of the protection measures associated with pollock, Pacific cod, and Atka mackerel fisheries and pushes it further negative toward a value that the Council's SSL committee determined was too low to ensure adequate protection for Steller sea lions. Further adverse changes to the Steller sea lion conservation program through future eroding of existing protection measures could result in the trajectory index reaching this line. If this occurs, mitigation measures would be required in order to proceed with that proposed action.

The BOF action was considered in a follow up informal consultation to the 2001 BiOp which concluded that the additional changes by the BOF would not significantly alter the overall level of protection for Steller sea lions (see Footnote 1) in a manner which would change the conclusion of the opinion.

2.7.1.3 Conclusions

As the above discussions describe, two separate actions are being considered; changes to restrictions that would authorize an AI pollock fishery outside of critical habitat and an exemption for pot gear in the Cape Barnabas and Caton Island haulouts. Both of these actions have been described in various NEPA and ESA documents including section 7 formal and informal biological opinions, and an EIS. In this EA we consider implementing various sub-options of each alternative together. The goal of course is to avoid jeopardizing the continued existence of Steller sea lions, avoid destroying or adversely modifying their critical habitat, and avoid over burdening the various fishery interests with overly conservative actions.

In this document we have shown that Alternative 3 is not a viable option for consideration by the Council without reinitiation of formal section 7 consultation under the ESA. Alternative 1 is that status-quo which would allow a seasonal distributed pollock fishery to occur outside of critical habitat in the AI. NMFS has determined that fisheries seasonally distributed, and occurring outside of critical habitat, to be sufficiently risk averse in avoiding adverse impacts to foraging Steller sea lions. Alternative 2 is a more risk averse approach - the complete closure of the AI pollock fishery. It follows then that this must be more protective for Steller sea lions. However, NMFS cannot determine that any conservation gain for Steller sea lions would accrue from this closure such that other areas inside critical habitat could be opened with any substantial fishery activity.

As described above in section 2.7.1.2, an exemption for vessels using pot gear for Pacific cod around Cape Barnabas and Caton Island haulouts has been discussed through informal consultation with the agency. Although the action would have a presumably adverse effect on foraging sea lions, it would be extremely minor and would not jeopardize this species survival or recovery. A modeling exercise (DeMaster pers. comm.), also indicated that this effect would be very small. The adoption of this alternative by the Council and eventually by NMFS is not likely to increase the amount of fishing effort in these areas beyond what has been described in previous informal consultations and that described in this document. No adverse impacts not previously considered are likely.

Considering the possible scenarios that could be chosen by the Council and NMFS, and given the information contained in this document, the combination of choosing either Alternatives 1 or 2 with Alternative 5 appears to be both conservative under the ESA and responsive to Magnuson-Stevens Act concerns. The most beneficial scenario of these two options, with respect to the survival and recovery of

the endangered Steller sea lion, is likely to be the more risk-averse approach of choosing Alternatives 2 and 5 together. However, it is important to re-iterate the fact that the marginal benefit from closing the AI pollock fishery from the status-quo alternative is unknown. NMFS does not see this as a necessary component of any conservation plan, yet it could in some instances offer additional protection.

2.7.2 Socio-economic impacts

A description of the BSAI pollock trawl and GOA Pacific cod fisheries and analyses of the socio-economic impacts of these alternatives may be found in Sections 3 and 4. Section 3 contains a Regulatory Impact Review (RIR), conducted to review the costs and benefits of the alternatives in accordance with the requirements of E.O. 12866. Summaries of the cost and benefit analyses may be found in Tables 6 and 7. Section 4 contains an Initial Regulatory Flexibility Analysis, conducted to evaluate the impacts of the preferred alternatives on small entities, in accordance with the provisions of the Regulatory Flexibility Act.

2.8 Cumulative Effects

Opening Date of Chignik Pacific Cod State Managed Fishery – A State action that is related to federal management of the GOA Pacific cod fishery and associated Steller sea lion protection measures.

The State managed Pacific cod fishery in the Chignik area historically has opened seven days following the closure of the directed federal season in the Central Gulf of Alaska. The exception adopted by the BOF will allow the state managed fishery to open earlier than in previous years. The State managed Pacific cod fishery in the Chignik area opened March 21 in 1999 and March 11 in 2000 and 2001. The State parallel fishery that operates off the federal TAC would closed under State regulation with the opening of the State managed fishery. The BOF changed the opening date to allow Chignik jig and pot fishermen maximum opportunity to harvest cod during better market conditions, earlier in the year. The State managed Pacific cod pot fishery is limited to 60 pots while the parallel fishery has no pot limit. The rate of harvest will continue to be limited by the 60 pots per vessels restriction, and the total amount taken will continue to be managed under the State's guideline harvest limit (GHL). Because this action is limited to the State managed fishery which has a pot limitation and the GHL, the earlier harvest of Pacific cod in the Chignik area State managed fishery should not have an adverse effects on Steller sea lions.

Cumulative effects

The SSL SEIS (NMFS 2001a) presents an assessment of cumulative effects of alternative SSL protection measures in Section 4.13. The SEIS assesses cumulative effects of environmental factors; external factors and consequences; incidental take/entanglements of Steller sea lions, other marine mammals and birds; spatial/temporal harvest of prey; and disturbance of prey by fishing activities. The alternatives considered in this EA would change these effects only to the extent that they change the spatial and temporal harvest of Steller sea lion prey.

With the exception of Alternative 3, the alternatives considered in this EA would have incremental effects that are sufficiently minor on the spatial and temporal harvest of pollock, Pacific cod, or other groundfish so as to not deviate from the conclusions of the cumulative impact assessment presented in the SSL SEIS. Alternative 3 could increase the intensity of the impacts associated with an Aleutian

Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA. Thus, the state and federal fisheries are not likely to cause cumulative effects beyond those described in the SSL SEIS. Of course, if any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA

A summary of the SEIS's cumulative effects determinations on spatial and temporal harvest of prey follows:

Spatial and temporal concentrations of fishery harvest under [existing protection measures (Alternative 4 of the SSL EIS)], is addressed by fishery specific closed areas around rookeries and haulout sites, together with season and catch apportionments. Daily removal rates are fairly uniform throughout the year, but in the Aleutian Islands, the daily catch rates for prey species, including pollock, are the largest of all alternatives considered, especially in the critical spring period. A series of closures and removal rates further spreads out the catch. [Areas 4 and 9 (see Figure 1 of this EA)] and the Seguam foraging area are closed to fishing for pollock, Pacific cod and Atka mackerel and within 20 nm of five northern Bering Sea haulouts. The closure of these areas is not likely to be of great benefit to Steller sea lions, however, as the amount of pollock and Pacific cod catch and Atka mackerel fishing effort [in these areas]has been minimal. Closures around rookeries and haulouts result in spatial separation between fisheries and foraging habitat. Direct effect on spatial and temporal concentration of fisheries for the [current protection measures (Alternative 4 in the SSL EIS)] was considered insignificant.

Cumulative effects were identified for spatial/temporal concentration of fisheries harvest of prey. The difference between [current protection measures (alternative 4 in the SEIS)] and [the no action alternative (no protection measures under Alternative 1 in the SEIS)] is likely indistinguishable on the population level. Cumulative effects, therefore, are similar to Alternative 1 and considered conditionally significant adverse.

2.9 Conclusions

To determine the significance of impacts of the actions analyzed in this EA, we considered the following as required by NEPA, 50 CFR § 1508.27, and NOAA Administrative Order 216-6:

Context: Adjustments to Steller sea lion protection measures would be implemented for the groundfish fisheries of the BSAI and GOA. Any effects of the action are limited to these areas. The effects on society within these areas are on individuals directly and indirectly participating in the groundfish fisheries and on those who use the ocean resources. The action is to consider more or less restrictive measures on the Aleutian Islands pollock fishery or relieve restrictions on the Pacific cod pot gear fishery near two haulouts in the GOA. The proposed actions involve relatively small amounts of groundfish harvest, although they still could have localized or regional impacts on society.

Intensity: Listings of considerations to determine intensity of the impacts are in 50 CFR § 1508.27 (b) and in the NOAA Administrative Order 216-6, Section 6. Each consideration is addressed below in order as it appears in the regulations.

- Adverse or beneficial impact determinations accruing under Steller sea lion protection measures are described in the SSL EIS (NMFS 2001a, Chapter 4, pages 4-1 to 4-628). With the exception of Alternative 3, the alternatives considered in this EA would have incremental effects that are sufficiently minor on the spatial and temporal harvest of pollock and Pacific cod so as to not deviate from the conclusions presented in the SSL SEIS. Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of Alternative 3 would likely result in a re-initiation of formal section 7 consultation under the ESA.
- 2 Public health and safety will not be affected in any way not evaluated under previous actions or disproportionally.
- Cultural resources and ecologically critical areas: This action takes place in the geographic areas of the Aleutian Islands and Gulf of Alaska, generally from 3 nm to 200 nm offshore. The land adjacent to these areas contain cultural resources and ecologically critical areas. The marine waters where the fisheries occur contain ecologically critical area. Effects on the unique characteristics of these areas are not anticipated to occur with this action and mitigation measures are part of existing fisheries management measures.
- Controversiality: This action deals with temporal and spatial distribution of fisheries as deemed necessary to protect the western DPS of Steller sea lions and avoid jeopardy or adverse modification of its critical habitat. Differences of opinion exist among various industry, environmental, management, and scientific groups on the level of fishery restrictions necessary to accomplish an adequate level of protection while minimizing burden on the fishing industry. This action is a small component of the total suite of management measures implemented for SSL protection which are considered controversial. Except for Alternative 3, the proposed actions would not result in effects that have not already been analyzed in the SSL SEIS or follow up ESA consultations. None of the alternatives would have other than minor impacts on the human environment and are not considered controversial for that reason.
- Risks to the human environment by current fishing activities, particularly those targeting important SSL prey items such as pollock, Pacific cod and Atka mackerel fisheries, are described in the SSL SEIS (NMFS 2001a, Chapter 4, Section 4.12, pages 4-342 to 4-439). Additional risks also are described in detail in the Draft Programmatic SEIS (NMFS 2001c). Because of the mitigation measures implemented with every past action, it is anticipated that there will be minimal or no risk to the human environment beyond that disclosed in these prior NEPA documents. Section 2.7 of this EA/RIR/IRFA describes the effects of this action on the human environment. With the exception of Alternative 3, minimal risk is anticipated with the implementation of the remaining alternatives.
- Future actions related to this action may result in impacts. Additional information regarding marine species or fisheries may make it necessary to change management measures. Any changes in management measures that could impact the effectiveness of Steller sea lion protections may result in significant impacts. Pursuant to NEPA, appropriate environmental analysis documents (EA or EIS) will be prepared to inform the decision makers of potential impacts to the human environment and will strive to implement mitigation measures to avoid significant adverse impacts.

- Cumulatively significant impacts beyond those described in SSL Protection Measures SEIS (NMFS 2001a, Chapter 4, Section 4.13, pages 4-440 to 4-628) are not anticipated with this action.
- Districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places: This action will have no effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant scientific, cultural, or historical resources. This consideration is not applicable to this action.
- Impact on ESA listed species: ESA listed species that range into the fishery management areas are listed in Appendix 2. With the exception of Alternative 3, none of the alternatives considered in this EA would impact any listed species to an extent not previously considered in the 2001 biological opinion on Steller sea lion protection measures. The status of section 7 consultations is summarized below by group: marine mammals, Pacific salmon, and seabirds.

ESA Listed Marine Mammals A Biological Opinion was written on Alternative 4 (the chosen alternative) for the Steller Sea Lion Protection Measures SEIS (NMFS 2001a, Appendix A). The 2001 Biological Opinion concludes the Alternative 4 suite of management measures would not likely jeopardize the continued existence of the western or eastern populations of Steller sea lions, nor would it adversely modify the designated critical habitat of either population. It is important to point out that the 2001 Biological Opinion does not ask if Alternative 4 helps the Steller sea lion population size recover to some specified level so that the species could be delisted, but rather asks if Alternative 4 will jeopardize the Steller sea lion's chances of survival or recovery in the wild. While the Biological Opinion has concluded that Alternative 4 does not jeopardize the continued survival and recovery of Steller sea lions, it none-the-less identified four reasonable and prudent measures to include with Alternative 4 as necessary and appropriate to minimize impacts of the fisheries to Steller sea lions. The measures are: (1) monitoring the take of Steller sea lions incidental to the BSAI and GOA groundfish fisheries; (2) monitoring all groundfish landings; (3) monitoring the location of all groundfish catch to record whether the catch was taken inside critical habitat; and (4) monitoring vessels fishing for groundfish inside areas closed to pollock, Pacific cod and Atka mackerel to see if they are illegally fishing for those species.

ESA Listed Pacific Salmon When the first Section 7 consultations for ESA listed Pacific salmon taken by the groundfish fisheries were done, only three evolutionary significant units (ESU)s of Pacific salmon were listed that ranged into the fishery management areas. Additional ESUs of Pacific salmon and steelhead were listed under the ESA in 1997, 1998 and 1999. Only the Snake River fall chinook salmon has designated critical habitat and none of that designated habitat is marine habitat. In 2000, formal consultation was initiated for all twelve ESUs of ESA listed Pacific salmon that are thought to range into Alaskan waters for the authorization of the groundfish fisheries under the FMPs for the GOA and BSAI (NMFS 2000). A determination of not likely to jeopardize the continued existence is in the resulting biological opinion. The FMP level consultation (NMFS 2000) included reconsideration of all the listed species of Pacific salmon thought to range into the management area and redetermined no jeopardy for all ESUs. The Incidental Take Statements accompanying the biological opinions state the catch of listed fish will be limited specifically by the measures proposed to limit the total bycatch of chinook

salmon. Bycatch should be minimized to the extent possible and in any case should not exceed 55,000 chinook salmon per year in the BSAI fisheries or 40,000 chinook salmon per year in the GOA fisheries.

ESA Listed Seabirds Two section 7 consultations regarding seabirds were reinitiated with USFWS in 2000. Consultations have not been concluded as yet. The first is an FMP-level consultation on the effects of the BSAI and GOA FMPs in their entirety on the listed species (and any designated critical habitat) under the jurisdiction of the USFWS. The second consultation is action-specific and is on the effects of the 2001 to 2004 TAC specifications for the BSAI and GOA groundfish fisheries on the listed species (and any critical habitat) under the jurisdiction of the USFWS. This action-specific consultation will incorporate the alternatives proposed in this SSL Protection Measures SEIS and the 2002 TACs for the groundfish fisheries. The most recent Biological Opinion on the effects of the groundfish fisheries on listed seabird species expired December 31, 2000. NMFS requested and was granted an extension of that Biological Opinion and its accompanying Incidental Take Statement (USFWS 2001). USFWS intends to issue a Biological Opinion in 2002. This will allow for the consideration of new information: recommendations by Washington Sea Grant Program on suggested regulatory changes to seabird avoidance measures based on a two-year research program as well as modifications to fishery management measure decisions informed by the Steller sea lion Protection Measures.

Reinitiation of Section 7 Consultation With the exception of potential impacts on Steller sea lions under Alternative 3, section 7 consultations for ESA listed marine mammals or Pacific salmon are not being reinitiated for this action because changes in fishing activities would not occur that would result in effects sufficient to trigger reinitiation. Those triggers include: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion; and (4) a new species is listed or critical habitat designated that may be affected by the identified action. In instances where the amount or extent of incidental take is exceeded, the action agency must immediately reinitiate formal consultation.

- This action does not violate Federal, State, or local law or requirements. Alternative 5 would bring greater consistency between Federal and State fishery management regulations. If the Council chooses Alternative 3 as the preferred alternative, NMFS will initiate formal consultation and prepare a biological opinion on the impacts of that action on the western DPS of Steller sea lions and its critical habitat. If the preferred alternative requires an RPA, NMFS will work with the Council to arrive at appropriate mitigating measures, including maintaining the status quo alternative of seasonal apportionments of Aleutian Islands pollock TAC.
- This action will not result in the introduction or spread of a non-indigenous species beyond what already has been considered in the SSL SEIS.

3.0 REGULATORY IMPACT REVIEW

3.1 Introduction

This Regulatory Impact Review (RIR) examines the costs and benefits of two proposals to modify the Steller sea lion protection measures adopted by the North Pacific Fishery Management Council (Council) at its October 2001 meeting (the October protection measures are summarized in the Appendix to this EA/RIR/IRFA).

One of these proposals would allow pot fishing for Pacific cod within three nautical miles of haulouts at Cape Barnabas on Kodiak Island and at Caton Island, southwest of King Cove on the Alaskan Peninsula. Under the October protection measures, pot fishing is not allowed in these areas.

The other proposal would change the regulations governing pollock trawling in the Aleutian Islands. Under the October protection measures, directed pollock trawling is to be permitted outside of critical habitat in the Aleutians in 2003 for the first time since 1998. The fishery is to be conducted in two seasons; 40% of the TAC is to be made available to the fishery from January 20 to June 10, and 60% is to be made available from June 10 to November 1. One of the alternative proposals evaluated in this RIR would close the directed fishery, while the other would open it without the seasonal constraints.

3.2 What is a Regulatory Impact Review?

This RIR is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735; October 4, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material
 way the economy, a sector of the economy, productivity, competition, jobs, local or tribal
 governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

In part, the Regulatory Impact Review (RIR) is designed to provide information to determine whether the proposed regulation is likely to be "economically significant."

3.3 Statutory authority

The statutory authority for these actions was described in detail in Section 1.0 of this EA/RIR/IRFA. Under the Magnuson-Stevens Act the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the Regional Fishery Management Councils. The groundfish fisheries in the Exclusive Economic Zone off Alaska are managed under the Fishery Management Plans for Groundfish of the Gulf of Alaska and the Fishery Management Plan for the Bering Sea and Aleutian Islands Area Groundfish.

3.4 Purpose and need for action

Aleutian Islands pollock

The objectives of this action are twofold: (1) To protect the western DPS of the Steller sea lion from jeopardy and to protect its habitat from adverse modification, and (2) avoid unnecessary burdens on the fishing industry. Unnecessary burdens may be imposed if Steller sea lion protections are greater than those necessary to prevent jeopardy and adverse modification. While the action has two purposes, there is not an intention to tradeoff protection to the Steller sea lions against the economic burden on the industry. Prevention of jeopardy and adverse modification is paramount and not conditioned by economic considerations. The intent of the action is to minimize the burden on industry, given that jeopardy and adverse modification have been prevented.

Through 1998 there was an active directed pollock trawl fishery in the Aleutian Islands. A description of this fishery may be found in Section 3.6 of this EA/RIR/IRFA.

In a December 3, 1998 Biological Opinion (BiOp), issued pursuant to the ESA, NMFS concluded that the pollock fishery in the BSAI was likely to jeopardize the continued existence of the western distinct population segment (DPS) of the Steller sea lion and was likely to adversely modify sea lion critical habitat. Based on the RPA framework in the BiOp, the Council recommended and NMFS implemented a closure of directed fishing for pollock in the Aleutian Islands. This closure was aimed at reducing the concentration of the pollock fishery in time and space. (BiOp 12-3-98, page 114; BiOp, 12-22-98, page 115). This closure was implemented in an emergency interim rule in 1999 (64 *FR* 3437; January 22, 1999), and remained in place from 1999 through 2002. An incidental catch allowance of 2,000 mt was retained in 1999, but reduced in subsequent years.

In October 2001, the Council adopted a new set of measures to protect the Steller sea lions from the potential effects of the pollock fishery. In this new set of measures, the Aleutian Islands pollock closure was continued through 2002 and then lifted in 2003. Under these new proposals, a directed fishery will be allowed for pollock in the Aleutian Islands in 2003. This fishery will take place outside of critical habitat, and will allocated between two seasons. The first season, which will run from January 20 to June 10 will be allowed to take 40% of the TAC, while the second season, which will run from June 10 to November 1, will be allowed to take 60% of the TAC. (67 FR 956; January 8, 2002) In a Biological

Opinion (BiOp) issued on October 19, 2001, NMFS found that the new set of measures to protect the Steller sea lions, including the provisions regarding directed pollock fishing in the Aleutians in 2003 was not likely to jeopardize the continued existence of the western DPS of the Steller sea lion or adversely modify its designated critical habitat. (NMFS 2001a, Appendix A, page 185).

Caton Island - Cape Barnabas Pacific cod pot

The objectives of this action are threefold: (1) To protect the western DPS of the Steller sea lion from jeopardy and to protect its habitat from adverse modification,(2) avoid unnecessary burdens on the fishing industry, and (3) bring about consistency between Federal and Alaska regulations governing pot fishing within three miles of the two haulouts.

Among the Steller sea lion protection measures the Council adopted at its October 2001 meeting were two that prohibited the use of pot gear within three miles of haulouts at Caton Island (to the southwest of King Cove on the Alaska Peninsula) and at Cape Barnabas (on the south shore of Kodiak Island). The waters closed to pot gear by these provisions are waters of the State of Alaska that are open for fishing during the "parallel" fisheries for groundfish that operate in State waters while the groundfish fisheries in Federal waters are open. While the Council measures bound vessels fishing in State waters under a Federal fishing permit, they did not bind vessels fishing with pots under State permits and licenses, but without a Federal permit. Similar limitations affected other Federal provisions that extended to State waters.

The Alaska Board of Fisheries met in November 2001, and among other issues, addressed potential conflicts between Federal and State regulations rising from the Steller sea lion protection provisions. Although the Board adopted regulations which generally led to congruence between the State and Federal regulations, it did not do so for the Caton Island and Cape Barnabas haulout pot closures. The BOF's reasoning is discussed in Section 2.7 of the EA.

Market failure rationale

U.S. Office of Management and Budget guidelines for analyses under E.O. 12866 state that

...in order to establish the need for the proposed action, the analysis should discuss whether the problem constitutes a significant market failure. If the problem does not constitute a market failure, the analysis should provide an alternative demonstration of compelling public need, such as improving governmental processes or addressing distributional concerns. If the proposed action is a result of a statutory or judicial directive, that should be so stated.²

The management programs that will be modified by the alternatives reviewed in this RIR are a response

²Memorandum from Jacob Lew, OMB director, March 22, 2000. "Guidelines to Standardize Measures of Costs and Benefits and the Format of Accounting Statements," Section 1.

to a (a) fisheries common property market failure, and a (b) "public goods" market failure interfering with the ability of the private sector to adequately protect an endangered species (Steller sea lion). The alternatives reviewed here are not, in themselves, responses to new market failures, but are efforts to modify the overall management program to solve the problems resulting from the market failures.

3.5 Alternatives considered

The alternatives were described in detail in Section 2.5 of the EA. Maps in Figures 1 and 2 in that section show the areas covered by the alternatives. As described in Section 2.5, Alternatives 1 to 3 are mutually exclusive and Alternatives 4 and 5 are mutually exclusive. However, any of Alternatives 1 to 3 may be chosen in combination with either Alternative 4 or 5. In summary:

Aleutian Islands pollock

Three alternatives are under consideration for the Aleutian Islands pollock fishery: This analysis assumes that January 1, 2003 would be the effective date for these alternatives.

- (1) A split season outside of critical habitat with (a) 40% of the TAC from January 20 to June 10, and (b) 60% of the TAC from June 10 to November 1 (Status Quo)
- (2) Closure of the fishery
- (3) A single season outside of critical habitat.

Critical habitat for the western DPS of the Steller sea lion is shown in Figure 1. Under Alternatives 1 and 3, pollock fishermen would be allowed to fish in the Aleutian Islands outside of the critical habitat areas designated in the map.

Caton Island - Cape Barnabas Pacific cod pot

Two alternatives are under consideration for the Caton Island and Cape Barnabas pot fishing vessels. This analysis assumes that January 1, 2003 would be the effective date for these alternatives.

- (4) No exemption for these vessels (status quo)
- (5) Exempt pot fishing vessels from SSL closures from 0 to 3 nautical miles around Caton Island and Cape Barnabas

The Caton Island haulout is on Caton Island to the southwest of King Cove on the Alaskan Peninsula, while Cape Barnabas is a haulout on the south side of Kodiak Island. The locations of these, and the areas within three miles of each, are shown in Figure 2.

3.6 Description of fishery

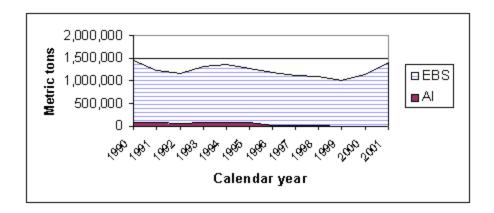
³"Public goods" has a technical meaning in economics. It refers to goods that have two characteristics: (a) one person's consumption doesn't interfere with another person's consumption, and (b) if the good is provided at all, no one can be prevented from enjoying it. Goods that have these characteristics may be underprovided by the private sector leading to a market failure. The continued existence of the Steller sea lion is a good that has both these characteristics.

Section 2.4 of this EA/RIR/IRFA lists recent reports with comprehensive descriptions of the social and economic backgrounds of the groundfish fisheries off of Alaska. This section provides detailed descriptions of the two fisheries that may be affected by these alternatives.

Aleutian Islands pollock

The directed fishery for pollock in the Aleutian Islands was not given pollock allocations in the years from 1999 to 2002. When it did receive allocations, prior to 1999, the fishery took small volumes of pollock compared to the larger, adjacent, Eastern Bering Sea pollock fishery. Relative volumes from the two fisheries are shown in the following Figure 3 (Ianelli, *et al.* Table 1.1, page 1.25).

Figure 3. Metric tons of pollock caught in the Eastern Bering Sea and Aleutian Islands pollock fisheries, 1990-2001.



In the last years that it took place, the directed Aleutian Islands trawl fishery took most of its catch from within Steller sea lion critical habitat. From 1995 to 1998, catcher vessels took between 78% and 88% of their annual catches from within critical habitat, while catcher/processor vessels took between 74% and 99% of their annual harvest from critical habitat. In part, the large proportion of the harvest coming from within critical habitat may be due to the narrow continental shelf in the Aleutian Islands area. Vessel operators are forced to fish closer inshore.

This fishery also took almost all of its harvest within the "A" season. Of the four years, it was only in 1998 that any pollock appears to have been taken in the "B" season, and then the total was less than 1% of the annual harvest. (NMFS-SF-AKR "Catch by vessel" data set)

In 1999, the numbers of vessels of different types that were active in the Aleutian Islands pollock fishery from 1996 to 1998 were described in the following terms (NMFS 1999, page 219):

"In 1996, for example, one mothership, twenty-three catcher/processors, and four inshore processors recorded pollock landings deriving from the Aleutian Islands management area, according to NMFS Blend data files. The mothership was greater than 155' length overall (LOA), as were 22 of the 23 catcher/processors. One catcher/processor was reportedly less than 124' (LOA). ADF&G Fish Ticket data indicate that 22 catcher vessels delivered pollock to inshore processors from the Aleutian Islands area in that

year. Of these, four were less than 124' (LOA), 13 were in the 124' to 155' LOA class, and five were greater than 155' in length.

"The same data sources reveal that in 1997, there were no motherships participating in this fishery. There were 19 catcher/processors (all of which were greater than 155' LOA), while four inshore processors received pollock from the Aleutian Islands management area, and were supported by 19 catcher boats (four under 124' LOA, 11 in the 124' to 155' length category, and four greater than 155' LOA).

"The 1998 data show no participation by the mothership sector. Six C/Ps were present, while three inshore processors reported deliveries from the AI fishery in that year. A total of 26 catcher boats were credited with deliveries of pollock from the AI target fishery in 1998.⁴ Three catcher boats reportedly delivered only "over-the-side" to C/Ps, while as many as 14 catcher boats are reported to have delivered pollock catch to both atsea and inshore processors. Nine boats delivered exclusively to inshore operations from the Aleutian Islands management area, that year. NORPAC and ADF&G data suggest that this "fleet" of catcher boats was comprised of 3 vessels 60' to 99' LOA, 9 in the 100' to 124' LOA class, and 14 vessels 125' or greater."

Industry sources have indicated that the pollock taken in the Aleutian Islands fishery are larger than those in the Eastern Bering Sea, and may have a higher roe content. The fish in the Aleutians tend to be older than those in the Eastern Bering Sea and so harvests may well contain larger fish on average. It is not clear whether Aleutian Islands fish have a average higher roe content as individuals. Any given volume of fish harvested may have a higher roe content due to the larger proportion of older fish. Moreover, during the years the Aleutian Islands fishery took place, the harvest took place later in the season than the Eastern Bering Sea winter harvest, and may have tended to be composed of riper pollock. Larger fish and higher roe yields may have generated higher prices for Aleutian Islands pollock (larger fish may produce higher recovery rates or be more suitable for fillet production). However, vessels operating in the Aleutians, dependent on inshore processors, would have been further from port and processing facilities than vessels operating in the southern Bering Sea. This may have led to higher operating costs, for inshore catcher vessels.

Entry to the pollock fishery in the BSAI is now controlled by the provisions of the American Fisheries Act of 1998 (AFA). Among other things, the AFA specifically listed the vessels that would be allowed to participate in the fishery, allocated the available TAC between the different fleet segments, encouraged fishing operations to fish cooperatively for pollock, and placed barriers in the way of expansion into new fisheries by pollock operations, once they were fishing for pollock more efficiently under the AFA.

⁴ Source: NMFS NORPAC and ADF&G fish tickets. Inshore targets calculated by Alaska Fisheries Science Center, on a per vessel basis. At-sea vessels delivering to pollock target processors during the pollock season opening are assumed to be catching pollock.

⁵Dr. Lewis Queirolo, NMFS-AKR. Personal communication 2-28-02.

⁶James Ianelli. NMFS-Alaska Science Center. Personal communication 2-28-02.

Any of the pollock vessels eligible to fish or operate in the Bering Sea under the AFA would be eligible to fish in an Aleutian Islands directed fishery. Currently this includes 112 catcher vessels, 19 catcher/processors, and 3 motherships. (NMFS, 2002, pages 4-176 to 4-183). The Bering Sea pollock fishery caught 1.134 million metric tons of pollock in 2000, with an estimated ex-vessel value of \$234 million⁷ (Hiatt, *et al.* Table 1, page 14 and Table 19, page 48), and with a first wholesale value of about \$800 million.⁸

Through the Community Development Quota (CDQ) program, the North Pacific Fishery Management Council and NMFS allocate a portion of the BSAI groundfish, prohibited species, halibut and crab TAC limits to 65 eligible Western Alaska communities. These communities work through six non-profit CDQ Groups to use the proceeds from the CDQ allocations to start or support commercial fishery activities that will result in ongoing, regionally based, commercial fishery or related businesses. The CDQ program began in 1992 with the allocation of 7.5% of the BSAI pollock TAC. The fixed gear halibut and sablefish CDQ allocations began in 1995, as part of the halibut and sablefish Individual Fishing Quota Program. In 1998, allocations of 7.5% of the remaining groundfish TACs, 7.5% of the prohibited species catch limits, and 7.5% of the crab guidelines harvest levels were added to the CDQ program, while the CDQ allocation of pollock increased to 10% of the TAC.

Caton Island - Cape Barnabas Pacific cod pot

Table 3 summarizes information on gross revenues and vessel numbers for the Pacific cod pot fishery in the entire GOA.

Table 3. Gross Revenues and Vessel Numbers in the GOA Pacific cod pot fishery

Year	Catcher vessel gross (millions)	Catcher/ processor gross (millions)	Number of catcher vessels (vessels)	Number of catcher/ processors (vessels)	Average gross revenues for catcher vessels (thousands)	Average gross revenues for catcher/ processors	
1996	\$4.7	0	145	1	\$30	0	
1997	\$5.5	0	141	4	\$40	0	
1998	\$6.6	0	166	1	\$40	0	
1999	\$11.6	\$2.9	200	11	\$60	\$26	
2000	\$14.9	\$0.9	247	5	\$60	\$18	
Notes: Total gross revenues from Hiatt et al, Table 19, page 47; Numbers of vessels from Hiatt et al. Table 27, page 58.							

The numbers of vessels actually fishing in the area of Caton Island or Cape Barnabas are smaller. Caton Island lies within the State of Alaska's South Peninsula groundfish management area, while Cape

⁷Many operations are catcher/processors which process their own catch and do not sell it in arms length transactions to processors. The ex-vessel (or price when the fish is sold from the vessel) doesn't exist in these cases. This estimate has been prepared by extrapolating prices from catcher vessel sales to catcher/processor production.

⁸Estimate made using the volume of harvest reported earlier and a 2000 price of \$701.50 mt based on data supplied by the Alaska Science Center.

Barnabas lies within the State's Kodiak groundfish management area. The numbers of vessels fishing within the waters of these management areas, within State waters (inside three miles) within these areas, and within the Alaska statistical area within which the relevant haulout is located, are summarized in Table 4 below.⁹

The waters within three miles of Caton Island and Cape Barnabas are Alaska state waters. Two types of fisheries occur in these waters. When the Federal fisheries are open, Alaska opens its adjacent waters for "parallel" fisheries, that operate under the same rules, and fish from the same TACs, as the Federal fisheries. When the Federal fisheries are closed, Alaska opens "state managed" fisheries; state-managed fisheries operate under regulations adopted by the Alaska Board of Fisheries. The current prohibition on pot fishing within three miles of Caton Island and Cape Barnabas applies to the parallel fishery but not to the state-managed fishery. Table 4, therefore, only includes information about vessels fishing during the parallel fishery.

Vessel size information is not provided in Table 4. However, in the South Peninsula management area 90% of the vessels fishing in state waters during the parallel fishery in 1999 were less than 60 feet long, while 63% were in 2000. In the Kodiak management area, about 71% of the vessels fishing inside state waters during the parallel fishery in 1999 were under 60 feet, while 64% were in 2000. In the State of Alaska statistical reporting areas containing the Caton Island and Cape Barnabas haulouts, all of the pot vessels were less than 60 feet. (NMFS-SF-AKR "catch by vessel" data set).

Table 4. Numbers of Pacific cod pot fishing vessels in the State of Alaska's South Peninsula and Kodiak groundfish management areas during the parallel fisheries

	South Peninsula 1	nanagement area	Kodiak mana	Sum of vessels fishing within Caton Island statistical		
Year	All waters	State waters	All waters	State waters	area and within Cape Barnabas statistical area	
1999	31	31	66	41	6	
2000	65	51	85	44	6	

Notes: Vessels counts generated from NMFS-SF-AKR "Catch by vessel" data set. "All waters" differ from "state waters" since the State management areas can include Federal waters. "Statistical areas" are State of Alaska statistical reporting areas within which Caton Island or Cape Bamabas are located. Due to the small numbers of observations, confidentiality rules prevent reporting of Caton Island and Cape Barnabas vessel numbers separately. The numbers fishing in each area have been summed. This may provide a slight overestimate of the number of unique vessels fishing in these areas.

The volumes of Pacific cod caught with pot gear near the Caton Island and Cape Barnabas haulouts during the parallel fisheries appear to be relatively small compared to total Pacific cod harvests in the

⁹It is impossible to tell how many vessels may have been active within three miles of the the Cape Barnabas and Caton Island haulouts. The most disaggregated data on location of fishing activity is by State of Alaska statistical reporting area. The three mile zone around each of these haulouts only takes up part of the statistical reporting area in which it is located.

respective State of Alaska management areas during the parallel fisheries.¹⁰ Table 5 compares 1999 and 2000 estimated harvests from the Caton Island and Cape Barnabas haulout closure areas with total harvests from Alaska waters within the Alaska management areas where the haulouts are located.

Table 5. Caton Island and Cape Barnabas State parallel fishery harvests in pounds in 1999 and 2000

	South Alaska Peninsula Area state waters	Kodiak Area state waters	Sum of South Alaska Peninsula and Kodiak	Caton Island plus Cape Barnabas	Caton and Barnabas as a percent of S. Peninsula and Kodiak
1999	3,076,651	5,925,404	9,002,055	92,594	1.03%
2000	5,329,545	4,335,868	9,665,413	39,683	0.41%

Notes: Total Area harvests are from Jackson and Ruccio, Tables 20 and 22, page 29. Harvests from the haulouts are estimated using NMFS-SF-AKR "Catch by vessel" data set. The "catch by vessel" catch data can't be disaggregated further than State of Alaska statistical reporting area. This was extrapolated to the haulout level (a portion of a statistical area) on the basis of the relative surface areas (a) within three miles of the haulout, and (b) in the statistical area. Note that these harvest estimates do not include harvests from the State managed fisheries that open after the Federal fisheries close. Caton Island and Cape Bamabas harvests have been aggregated to protect fishing vessel revenue confidentiality.

The pot vessels fishing in the Kodiak and South Peninsula management areas fish a diversified group of fisheries. Many use their pot gear to fish for Tanner crab. Some use it to fish for other groundfish species. Vessels under 58 feet may be involved in Alaska salmon seine fisheries. Some of these vessels can switch to trawl gear for groundfish fishing.

In general, gross revenues from pot fishing for Pacific cod appear to be a relatively small source of revenues for these operations. Vessels under 33 feet that fished for Pacific cod with pots in the Central Gulf (where Kodiak is located) earned between one percent and 6.3% of their gross revenues from Pacific cod between 1995 and 1999¹¹; they earned over 85% of their revenues from non-groundfish species in each of these years. Vessels between 33 and 60 feet showed more dependence on Pacific cod pot revenues. These vessels earned over 20% of their annual revenues from this source in each of these years. Vessels between 60 and 124 feet fall between these two extremes. These vessels earned between 9.2% and 20.6% from pot fishing for Pacific cod, depending on the year. (NMFS, 2001c, Table C-40, page C-115, Table C-44, page C-119, and Table C-49, page C-124).

Alaska landings estimates suggest that during these fisheries the Caton Island statistical area is one of the more important. (Jackson and Ruccio, Figure 7, page 37). There may be several reasons why the pot fishery is more significant during the state managed fishery than during the parallel fishery. Many of the vessels that fish in this area tend to fish with trawl gear during the period when the parallel fishery is open and with pot gear when the State managed fishery is open. Thus there are fewer vessels working with pots during the parallel fishery. Weather makes the Caton Island area less accessible during the parallel fishery than during the state managed fishery. The Pacific cod aggregations also change between the two fisheries in a way that makes it more productive to target them in the Caton Island area during the state managed fishery. (Michael Ruccio, Alaska Department of Fish and Game, personal communication, March 3, 2002.)

¹¹Some of the tables cited have data for 2000 and some do not. Because they are only available for some tables they are not cited here. When they are available they do not substantially alter the conclusions.

These patterns are somewhat different for vessels fishing for Pacific cod with pot gear in the Western Gulf, where the Caton Island haulout is located. The smallest vessels, between 33 and 60 feet, have about the same dependence on Pacific cod pot harvests as their counterparts in the Central Gulf in the 1995-1999. The two larger pot vessel classes, however, have somewhat smaller dependence on it. The 33 to 59 foot pot vessels have percentages that range from 6.5% to 23.2% depending on the year. The pot vessels between 60 and 124 feet have dependence percentages that never reach 5%. (NMFS, 2001c, Table C-40, page C-115, Table C-44, page C-119, and Table C-49, page C-124).

3.7 Summary of the benefits and costs

The benefits and costs of the alternatives are summarized below in Tables 6 and 7. These impacts are discussed more carefully in Sections 3.8 (Benefits), and 3.9 (Costs). The final section of the RIR, Section 3.10, summarizes the implications for the E.O. 12866 significance analysis. These alternatives are not significant within the meaning of E.O. 12866.

In general the information on operating behavior and costs that would make it possible to predict how fishermen and markets will react to the new regulation, and how their costs and revenues will change, is not available. Therefore, this analysis of benefits and costs must be primarily qualitative.

Table 6. Summary of the cost and benefit analysis for Aleutian Islands pollock restrictions

	Alternative 1	Alternative 2	Alternative 3
	Permit fishing outside of critical habitat - 40% of TAC from January 20 to June 10, 60% of TAC from June 10 to Nov. 1.	Directed pollock fishery closure in Aleutian Islands	Permit fishing outside of critical habitat - no seasonal restrictions
Impacts on resource management (See section 3.8)	none	Reduces pollock harvest in Aleutian Islands. Harvest of other species in Aleutians or Eastem Bering Sea likely to increase.	Aleutians pollock harvest is likely to become concentrated in the first part of the year.
Benefits (See section 3.8)	none	Reduction in harvest of pollock in Aleutians may benefit Steller sea lions there. However benefits are likely to be small. There is no jeopardy or adverse modification under the status quo. Moreover, the reduction may be offset by an increase in the harvest of another species in the BSAI, and this may offset the benefits. Net impact on Steller sea lions not known.	Up to \$5.9 million in additional revenue to the industry since more fishing will take place in the roe season
Costs (see Section 3.9)	none	Less than \$16 million.	Potential jeopardy to western DPS of Steller sea lions and adverse modification of critical habitat - potential reduction in non-use values
Net benefits	none	Qualitative analysis doesn't permit estimate	Qualitative analysis doesn't permit estimate
Program objectives (See Section 3.4)	Doesn't affect jeopardy or adverse modification of habitat. Doesn't change burden on AFA and CDQ fishing operations	Doesn't relieve burden on AFA and CDQ fishing operations. May not provide much protection to Steller sea lions.	Relieves burden on the BSAI AFA and CDQ pollock fishing operations but may contribute to jeopardy and adverse modification for SSL.
E.O. 12866 significance (see Section 3.10)	not significant	not significant: maximum gross revenue impact is \$16 million	not significant: maximum gross revenue impact is \$5.9 million

Notes: In the absence of any action, Alternative 1 will take effect in 2003, therefore Alternative 1 is the **status quo** and **no action** alternative. Alternative 1 has been used as the **baseline** against which the costs and benefits of the two other alternatives have been compared.

Table 7. Summary of the cost and benefit analysis for Caton Island and Cape Barnabas pot gear restrictions

	Alternative 4	Alternative 5	
	No exemption for these vessels (status quo)	Exempt pot fishing vessels from SSL closures from 0 to 3 nautical miles around Caton Island and Cape Barnabas	
Impacts on resource management (See section 3.8)	None	Small additional access by Pacific cod pot vessels inside critical habitat	
Benefits (See section 3.8)	None	Reduction in gross revenues "at risk" up to about \$63,000. This overstates the likely net benefits.	
Costs (see Section 3.9)	None	None	
Net benefits	None	Net benefits between \$0 and \$63,000	
Program objectives (See Section 3.4)	Prevents jeopardy and adverse modification, does not provide increased relief to industry, inconsistency between State and Federal regulations remains	Does not jeopardize Steller sea lions or adversely modify their habitat, provides some additional relief to industry, removes inconsistency between State and Federal regulations.	
E.O. 12866 significance (see Section 3.10)	Not significant	Not significant: maximum total gross revenue impact is \$63,000	
Notes: Alternative 4 (status quo) is the no action alternative and provides the baseline against which the costs and benefits for action			

Notes: Alternative 4 (status quo) is the no action alternative and provides the baseline against which the costs and benefits for action alternatives have been estimated.

3.8 Benefits of the alternatives

Aleutian Islands pollock

The no action alternative, which will be effective on January 1, 2003 if no action is taken, is Alternative 1. Alternative 1 allows pollock fishing in the Aleutian Islands to resume. The TAC is divided into two seasonal allocations: 40% in a January 20 to June 10 season, and 60% in a June 10 to November 1 season. Alternative 1 is used as a baseline against which the impacts of the other two alternatives are measured. Alternative 2 is more restrictive than Alternative 1, while Alternative 3 is less restrictive.

Alternative 2 would close directed fishing for pollock in the Aleutian Islands, leaving only an incidental catch allowance (ICA). The benefits from Alternative 2 would flow from the improved protection to the western DPS of the Steller sea lion by reducing the impacts of the fishery. Eliminating the directed fishery under Alternative 2 might provide a benefit by eliminating the removal of some pollock biomass in this area.

These benefits may be small. There are three reasons to believe this. First, Alternative 1 (which would allow a seasonally apportioned directed pollock fishery, outside of critical habitat in the Aleutian Islands) does not now impose jeopardy or adversely modify critical habitat. Under these circumstances an even more restrictive management approach, as envisioned under the Aleutian Islands closure, may accomplish little. Second, while the closure of the fishery in the Aleutians could reduce the impact of fishing on the Steller sea lions in the Aleutians, the potential additional protection in the Aleutians may be offset by increased harvesting efforts and production for other species. Third, time and area

restrictions in place under Alternative 1 (e.g. outside critical habitat, 40/60 seasonal split) mean that the fleet may have difficulty harvesting the full TAC.

The second reason is relevant since all groundfish fishery TACs in the BSAI are interrelated, because all are subject to a 2 million mt Optimal Yield (OY). Recalling that, for purposes of this analysis, the "no action" baseline assumes an Aleutian Island pollock fishery is authorized, this means that total groundfish harvests from the entire BSAI cannot total more than 2 million mt. The total groundfish OY is currently completely divided up among groundfish TACs. If the baseline pollock fishery in the Aleutians were eliminated, as proposed under Alternative 2, groundfish OY equal to 22,850 metric tons would be released for reallocation among the groundfish fisheries. This might be reallocated to the TAC for another species, or it might be reallocated to AFA pollock fishermen in the Eastern Bering Sea.¹²

It cannot be assumed, however, that OY released from use for Aleutian Islands pollock would be converted into Eastern Bering Sea pollock TAC. The Aleutian Islands and Eastern Bering Sea stocks of pollock are treated as separate stocks by managers. They are modeled separately, and the ABCs and TACs are set separately and independently. Aleutian Islands pollock TAC reductions could only be reallocated to the Eastern Bering Sea, if the Eastern Bering Sea pollock TAC was less than its ABC. This was the case in 2002, but this is not the case every year, and it cannot be assumed to be the case in 2003. Moreover, the allocation decision as to whether or not to reallocate the "available" tonnage to EBS pollock, or some other species, would be worked out in the Council process and it is not clear how the various criteria used to make these decisions would work in this case.¹³

The difficulties in determining the indirect effect on TACs for other species associated with the elimination of the directed pollock fishery in the Aleutians add considerably to the difficulty of estimating the degree of benefit of Alternative 2 to the western DPS of Steller sea lions. Increased effort elsewhere may offset a large part of the benefits.

The third reason is that constraints on time and place of harvest under Alternative 1 may make it hard for the fleet to take the full Aleutian Islands pollock TAC. In the description of this fishery it was pointed out that in the last years in which there was a directed harvest, most of the harvest came from within critical habitat. From 1995 to 1998, the catcher vessel fleet never took less than 78% of its harvest from critical habitat, while the catcher/processor fleet never took less than 74% of its harvest from critical habitat. This raises the possibility that under Alternative 1, the fleet may not be able to harvest the full TAC because of time or area restrictions. If so, the impact of a closure of the Aleutian Islands pollock fishery under Alternative 2 would be reduced.

Moreover, most of the harvest in those years came from the "A" season. The amounts harvested in the "B" season were trivial. In fact, from 1995 to 1997, over 60% of the harvest appears to have been concentrated in two statistical weeks at the end of February and the start of March. The harvest in 1998 was less concentrated, but was also essentially complete by mid-March. (NMFS-SF-AKR in-season

¹²A third alternative, that the sum of the TACS for the different groundfish species would be allowed to fall below the OY is also logically possible, but extremely unlikely.

¹³Ianelli, pers. comm.

¹⁴Seasonal and critical habitat harvests identified using the NMFS-SF-AKR "catch by vessel" data set.

management data set). If this is the case, the fleet may not be able to fully harvest the 60% of the TAC that is allocated to the "B" season under Alternative 1. If so, the impact of a closure of the Aleutian Islands fishery under Alternative 2 would be reduced, as compared to the no action baseline. On the other hand, if time constraints associated with Alternative 1's seasonal allocations interfered with the harvest of part of the TAC, the lifting of the time constraints under Alternative 3 would be more attractive (i.e. beneficial) to the fleet.

Estimated Aleutian Islands harvests by the different BSAI AFA fleet sectors under the different alternatives are summarized in Table 8. The projected ABC for the Aleutians in 2002 was 23,750 mt (SAFE, page 1.2). The incidental catch allowance (ICA) in 2001 was 900 mt. Both of these were adopted and projected to 2003 to serve as the basis for the calculations. The CDQ TAC was estimated to be 10% of the ABC for the Aleutians. The catcher vessel TAC was 50% of the TAC net of the ICA and the CDQ allowance, the catcher/processor TAC was 40% of the net, and the mothership allowance was 10% of the net. The catcher/processor TAC was divided between the catcher/processors and the catcher vessels delivering to the catcher/processors.

Table 8. Aleutian Islands pollock allocations under the three alternatives

	Alternative 1 Permit fishing outside of critical habitat - 40% of TAC from January 20 to June 10, 60% of TAC after June 10.		Alternative 2	Alternative 3 Permit fishing outside of critical habitat - no seasonal restrictions	
Fleet sector			critical habitat - 40% of TAC closure in Aleutian Islands from January 20 to June 10,		
	Jan 20-June 10	June 10-Nov 1	No fishing	Jan 20-June 10	June 10-Nov 1
CDQ	950	1,425	0	2,375	0
AFA - CV	4,095	6,143	0	10,238	0
AFA - CP	2,580	3,870	0	6,450	0
AFA - CV-CP	696	1,044	0	1,740	0
AFA-Mothership	819	1,229	0	2,048	0
ICA	90	00	900	90	00
Total	23,	750	0	23,	750

Notes: Under Alternative 3 it is assumed that all fishing for the directed TAC would take place in the first half of the year because of the higher pollock prices during that season. ICA is 2002 ICA. Total is 2002 Aleutian Islands ABC from Ianelli *et al*, page 1.2. CDQ allocation is 10% of the ABC. AFA allocation is ABC minus CDQ reserve and ICA. AFA fleet sub-allocations: 50% to CVs, 31.5% to CPs, 8.5% to CVs delivering to CPs, and 10% to motherships. These sub-allocations follow the practices of the Council under the AFA.

Table 8 shows that Alternatives 1 and 3 are expected to produce the same amounts of pollock, 23,750 metric tons. However, there are no restrictions on when it may be harvested under Alternative 3. Under Alternative 3, fishing operations are assumed to harvest the pollock in the first half of the year in order to take advantage of the higher prices for the roe bearing pollock at that time. Alternative 1, however, forces fishing operations to defer 60% of their harvest until the second half of the year, when prices are lower. Therefore, Alternative 3 is expected to produce higher gross revenues for the fishing operations than Alternative 1. Alternative 3 is estimated to produce about \$5.9 million more in gross revenues for

the fleet than Alternative 1.¹⁵ This estimate of the gross revenues from substituting Alternative 3 for Alternative 1 is a high measure of the benefits from that action since it does not take account of costs.

Caton Island, Cape Barnabas Pacific cod pot

In some previous analyses of area closures for Steller sea lion protection, the volumes of fish that it is estimated would have been taken from a restricted area if the area had been unrestricted, are described as volumes of fish placed "at risk" by the restriction. Similarly, the revenues associated with those fish are revenues placed "at risk." They are described as "at risk", rather than foregone, because it may be possible for the fleet to shift its effort somewhat and harvest equivalent fish in other areas. Under these circumstances, a closure may lead to no reduction in harvest, to some reduction in harvest, or (if reallocation of effort was not possible) to a total elimination of the harvest. Since no models were available which would have permitted an examination of the way fishing effort would respond to area restrictions, it was not possible to predict what would happen to fish production. These revenues were therefore described as "at risk".

Under Alternative 4, the status quo, an estimated 18 tons of Pacific cod would have been placed "at risk" for fisheries in the Caton Island and Cape Barnabas haulouts in 2000 through restrictions on vessels fishing with pots. Using an estimated first wholesale value for Pacific cod caught with fixed gear in the Gulf of Alaska in 2000 of about \$1,500, the gross value of the harvest placed "at risk" by the restrictions was about \$27,000. The first wholesale price is the product price received by the processors per ton of delivered raw material, revenues to fishing operations (ex-vessel revenues) would be less than this. Harvests vary somewhat from year to year. The first wholesale value of the 1999 harvest (using 2000 prices) would have been about \$63,000. Note that these are estimates of the maximum amounts of fish and revenues placed "at risk."

These estimates are maximum estimates because not all revenues placed "at risk" may be lost, if the fleet is able to redirect its efforts to other areas that are not as heavily restricted, and is able to make up some fraction of the fish placed "at risk." The areas around the Caton Island and Cape Barnabas haulouts are relatively small portions of the total area within State waters that the pot fishermen could exploit during the parallel fishery.

3.9 Costs of the alternatives

Aleutian Islands pollock trawl

It is impossible to predict the cost to the industry if Alternative 2 is substituted for Alternative 1. The

¹⁵These first wholesale gross revenues are based on estimates of the 2000 first wholesale prices per delivered metric ton on pollock prepared by the NMFS Alaska Science Center. The prices for catcher/processors were \$1,062.3 per ton in the first half of the year and \$454 per ton in the second half. The prices for catcher vessels were \$893.4 per ton in the first half of the year and \$577.3 in the second half. CDQ harvests were valued using the catcher/processor prices. Prices were estimated using weight data from blend estimates and value data from weekly and annual processors reports.

¹⁶Volume of production supplied by the NMFS-SF-AKR "catch by vessel" database. The estimated first wholesale price supplied by the NMFS Alaska Science Center.

value of the gross revenues lost could be regarded as a maximum estimate for three reasons. First, gross revenues exceed net revenues. Second, some of the revenue may be made up with increased fishing on another BSAI stock. Third, spatial and temporal constraints may make it difficult for the fleet to fully capture the Aleutian Islands TAC under Alternative 1, therefore, the incremental cost of adopting Alternative 2, as compared to the actual catch under Alternative 1, would be smaller than the value of the entire TAC. Given these considerations, the maximum loss from shutting down the fishery would be \$16 million (the total value of the Aleutian Island's TAC under Alternative 1 assuming the whole TAC is caught).¹⁷ The actual loss is probably less.

Under Alternative 2, if the change does involve a shift of the TAC from Aleutian Islands pollock to a species in the Bering Sea other than pollock, the burden of the change in alternatives would fall on the AFA qualified pollock fleet, while some other fleet would benefit from the change.

Under Alternative 3 the seasonal restriction on pollock fishery harvests would be lifted, and it is likely that almost all of the harvest would be taken in the first half of the year, probably in February and March, when the roe quality is highest. While this would increase the value of the TAC for the industry, it would increase the concentration of the fishery in time. This may impose important costs if it jeopardizes the continued survival of the western DPS of Steller sea lions, or adversely modifies its critical habitat. As noted in Section 2.8 of this EA/RIR/IRFA,

"Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA ... if any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA "

Caton Island, Cape Barnabas Pacific cod pot

As noted in the EA, in an "informal consultation" between the Sustainable Fisheries Division of the NMFS and the Protected Resources Division, in December 2001, it was determined that opening the areas to vessels using pot gear to fish for Pacific cod would have "...no appreciable adverse impacts to Steller sea lions or their critical habitat..." (Payne, Dec. 11, 2001, memorandum) Thus, Alternative 5 is assumed to cause no reduction in the use or non-use values associated with the Steller sea lion resource compared to Alternative 4.

3.10 Summary of the significance criteria

A "significant regulatory action" under E.O. 12866 means any action that is likely to result in a rule that

¹⁷These first wholesale gross revenues are based on estimates of the 2000 first wholesale prices per delivered metric ton on pollock prepared by the NMFS Alaska Science Center. The prices for catcher/processors were \$1,062.3 per ton in the first half of the year and \$454 per ton in the second half. The prices for catcher vessels were \$893.4 per ton in the first half of the year and \$577.3 in the second half. CDQ harvests were valued using the catcher/processor prices. Prices were estimated using weight data from blend estimates and value data from weekly and annual processors reports.

may:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the executive order.

These actions will not produce an effect on the economy of \$100 or more, or "adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities." The Aleutian Islands pollock actions proposed in the alternatives would not have significant impacts (as defined in E.O. 12866). Substitution of Alternative 2 for Alternative 3 might have revenue impacts on the order of \$5.9 million. Substitution of Alternative 1 for Alternative 3 would have revenue impacts less than \$16 million. The Caton Island, Cape Barnabas proposal has potential maximum effect on gross ex-vessel revenues of about \$63,000, and even these are believed to be a high estimate. In none of these cases would any conceivable sensitivity analysis bring the impacts to the \$100 million level.

NMFS has not identified any factors that would (a) "Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency"; (b) "Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof"; or (c) "Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the executive order."

4.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS

4.1 Introduction

This Initial Regulatory Flexibility Analysis (IRFA) examines the impacts on small entities of two proposals to modify the Steller sea lion protection measures adopted by the North Pacific Fishery Management Council (Council) at its October 2001 meeting. One of these proposals would allow pot fishing for Pacific cod within three nautical miles of haulouts at Cape Barnabas on Kodiak Island and Caton Island, south of King Cove. Currently pot fishing is not allowed in these areas. The other would change the regulations governing pollock trawling in the Aleutian Islands. Currently directed pollock trawling is to be permitted in the Aleutians in 2003 for the first time since 1998. The fishery is to be conducted in two seasons; 40% of the TAC is to be made available to the fishery from January 20 to June 10, and 60% is to be made available from June 10 to November 1. One of the alternative proposals evaluated in this IRFA would close the directed fishery, while the other would open it without the seasonal constraints.

4.2 The purpose of an IRFA

The Regulatory Flexibility Act (RFA), first enacted in 1980, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business, (2) to require that agencies communicate and explain their findings to the public, and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities. The RFA emphasizes predicting impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts while still achieving the stated objective of the action.

On March 29, 1996, President Clinton signed the Small Business Regulatory Enforcement Fairness Act. Among other things, the new law amended the RFA to allow judicial review of an agency's compliance with the RFA. The 1996 amendments also updated the requirements for a final regulatory flexibility analysis, including a description of the steps an agency must take to minimize the significant economic impact on small entities. Finally, the 1996 amendments expanded the authority of the Chief Counsel for Advocacy of the Small Business Administration (SBA) to file *amicus* briefs in court proceedings involving an agency's violation of the RFA.

In determining the scope, or 'universe', of the entities to be considered in an IRFA, NMFS generally includes only those entities that can reasonably be expected to be directly regulated by the proposed action. If the effects of the rule fall primarily on a distinct segment, or portion thereof, of the industry (e.g., user group, gear type, geographic area), that segment would be considered the universe for the purpose of this analysis. NMFS interprets the intent of the RFA to address negative economic impacts, not beneficial impacts, and thus such a focus exists in analyses that are designed to address RFA compliance.

Data on cost structure, affiliation, and operational procedures and strategies in the fishing sectors subject to the proposed regulatory action are insufficient, at present, to permit preparation of a "factual basis" upon which to certify that the preferred alternative does not have the potential to result in "significant adverse impacts on a substantial number of small entities" (as those terms are defined under RFA). Because, based on all available information, it is not possible to 'certify' this outcome, should the proposed action be adopted, a formal IRFA has been prepared and is included in this package for Secretarial review.

4.3 What is required in an IRFA?

Under 5 U.S.C., Section 603(b) of the RFA, each IRFA is required to contain:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and the legal basis for, the proposed rule;
- A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);
- A description of the projected reporting, record keeping and other compliance requirements of

- the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule;
- A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the proposed action, consistent with applicable statutes, and that would minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:
 - 1. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
 - 2. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
 - 3. The use of performance rather than design standards;
 - 4. An exemption from coverage of the rule, or any part thereof, for such small entities.

4.4 What is a small entity?

The RFA recognizes and defines three kinds of small entities: (1) small businesses, (2) small non-profit organizations, and (3) small government jurisdictions.

Small businesses. Section 601(3) of the RFA defines a 'small business' as having the same meaning as 'small business concern' which is defined under Section 3 of the Small Business Act. 'Small business' or 'small business concern' includes any firm that is independently owned and operated and not dominant in its field of operation. The SBA has further defined a "small business concern" as one "organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor...A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the firm is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture."

The SBA has established size criteria for all major industry sectors in the US including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of \$3.5 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$3.5 million criterion for fish harvesting operations. Finally a wholesale business servicing the fishing industry is a small businesses if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established "principles of affiliation" to determine whether a business concern is "independently owned and operated." In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

<u>Small organizations</u> The RFA defines "small organizations" as any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

<u>Small governmental jurisdictions</u> The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of less than 50,000.

4.5 What is this action?

The alternatives were described in detail in Section 1.5 of the EA and summarized in Section 2.5 of the RIR. To repeat:

Aleutian Islands pollock

Three alternatives are under consideration for the Aleutian Islands pollock fishery: This analysis assumes

that January 1, 2003 would be the effective date for these alternatives.

- (1) A split season outside of critical habitat with (a) 40% of the TAC from January 20 to June 10, and (b) 60% of the TAC from June 10 to November 1 (Status Quo)
- (2) Closure of the fishery
- (3) A single season outside of critical habitat.

Caton Island - Cape Barnabas Pacific cod pot

Two alternatives are under consideration for the Caton Island and Cape Barnabas pot fishing vessels. This analysis assumes that January 1, 2003 would be the effective date for these alternatives.

- (4) No exemption for these vessels (status quo)
- (5) Exempt pot fishing vessels from SSL closures from 0 to 3 nautical miles around Caton Island and Cape Barnabas

The Caton Island haulout is on Caton Island to the southwest of King Cove on the Alaskan Peninsula, while Cape Barnabas is a haulout on the south side of Kodiak Island.

4.6 Reason for considering the proposed action

The reasons for considering the proposed actions were discussed in detail in Section 2.2 of the EA and in Section 3.4 of the RIR. Briefly, in October 2001 the Council adopted a set of management measures designed to permit the Atka mackerel, pollock, and Pacific cod fisheries in the GOA and BSAI proceed without jeopardizing the western DPS of the Steller sea lion or adversely modifying its critical habitat. Subsequently, at its February 2002 meeting the Council requested a review of actions pertaining to the management of the Aleutian Islands pollock fishery and the restriction of Pacific cod fishing with pot gear near two sea lion haulouts in the GOA. These reviews represent an effort by the Council to ensure that once the sea lions have been protected, undue burden are not placed on the fishing industry and to minimize conflicts between Federal and State fishing regulations.

4.7 Objectives of, and legal basis for, the proposed action

As noted in the EA and the RIR, the objectives of these actions are: (1) avoid jeopardizing the continued existence of Steller sea lions and avoid adverse modification to Steller sea lion habitat, and (2) given that jeopardy and adverse modification are avoided, minimize the economic burden of the Steller sea lion protection measures on fishing vessels. The action affecting pot fishing within three miles of the Caton Island and Cape Barnabas haulouts has an additional objective: bring about consistency between Federal and Alaska regulations governing pot fishermen operating within three miles of the two haulouts.

The legal basis for the proposed action was discussed in Section 1.0 of this EA/RIR/IRFA. Under the Magnuson-Stevens Act the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the Regional Fishery Management Councils. The groundfish fisheries in the Exclusive Economic Zone off Alaska are managed under the Fishery Management Plans for Groundfish of the Gulf of Alaska and the Fishery Management Plan for the Bering Sea and Aleutian Islands Area Groundfish.

4.8 Number and description of small entities affected by the proposed action

The estimated numbers of large and small entities involved in the fisheries that are the subject of this action may be found in Table 9 below. Discussions of the numbers of entities, and brief descriptions may be found following the table. More detailed descriptions of the entities in these fisheries may be found in Section 3.6 of this EA/RIR/IRFA.

Table 9. Numbers of large and small entities affected by the action

Class of entity	Number small entities	Number large entities	Total entities
AFA catcher vessels delivering to inshore processors	0	8 (with 100 vessels)	8 (with 100 vessels)
AFA catcher vessels delivering to motherships only	1	≤4 (with 4 vessels)	≤5 (with 4 vessels)
AFA catcher vessels delivering to catcher/processors	5	≤2 (with 2 vessels)	≤7 (with 7 vessels)
AFA catcher/processors	0	8 (with 19 vessels)	8 (with 19 vessels)
AFA motherships	0	3	3
CDQ groups	6	0	6
Caton Island and Cape Barnabas Pacific cod pot vessel entities	≤ 6 operating near the haulouts	0	≤ 6 operating near the haulouts

Notes: SBA criteria use \$3.5 million in gross revenues as the large entity threshold for catcher vessels and catcher processors. As noted in the text, the methodology in use may have led to an overestimate of the number of small entities. CDQ groups are non-profits and are therefore small by definition. The AFA estimates are based on NMFS, 2002, Table 4.6.2, page 4-183.

The entities that would be regulated by the proposals to change the rules governing access to the Aleutian Islands pollock would the (a) CDQ groups that operate trawl vessels in the fisheries, (b) the cooperatives into which many pollock vessels and processing firms are organized under the provisions of the American Fisheries Act, and (c) entities owning pollock fishing vessels that are fishing independently of the cooperatives.

There were 112 catcher vessels active in the fishery. One hundred of these delivered to shoreside processors and motherships, five delivered only to motherships, and seven delivered to catcher/processors. All of the catcher vessels delivering shoreside were involved in fishery cooperatives. Because of their affiliations with other catcher vessels and with processors through these cooperatives, these have been treated as large entities. One of the five delivering to motherships was a small entity, and five of the seven delivering to catcher/processors were small entities. All of the motherships and catcher/processors are large entities. (NMFS, 2002, pages 176-183).¹⁸

¹⁸These estimates are based on estimates made in the IRFA that was included as a part of the AFA EIS. This IRFA was prepared in 2001 and these estimates are thus 2001 estimates. They may slightly underestimate the numbers of small entities among the catcher vessels delivering to motherships and to catcher/processors since the small entity threshold has recently been increased from \$3 million to \$3.5 million (67 FR 3041, January 23, 2002)

There are six CDQ groups that share in the 10% of the pollock TAC that has been set aside for the CDQ fisheries. These CDQ groups earned \$33 million in royalties from their pollock CDQ in 2000. These groups thus averaged \$5.5 million from these royalties.(Alaska DOC report, page 66). Although these earnings are above the \$3.5 million threshold the SBA uses to define large entities, these are technically non-profit operations and by definition are small.

The entities that would be regulated by the proposals to allow vessels fishing Pacific cod with pots to operate within three nautical miles of Cape Barnabas and Caton Island are the entities operating vessels fishing for Pacific cod with pot gear in the GOA. The best source of information on the size classification of groundfish vessels in the GOA are unpublished tables prepared by the NMFS Alaska Science Center. These show that in 2000, 252 pot catcher vessels and four pot catcher/processors fished for groundfish in the GOA. All of these were classified as small entities according to the SBA criteria. There are good reasons to believe that these tables overestimate the numbers of small entities. ¹⁹ The NMFS Alaska Science Center also provides related tables showing estimated gross revenues for large and small entities. These tables show that the small catcher vessels grossed an average of about \$80,000 in 2000, while the small catcher/processors grossed an average of \$310,000 in 2000. These estimates of gross revenues only include revenues from groundfish fisheries and may therefore be underestimates of actual gross revenues.²⁰

While the actual number of vessels fishing with pot gear in the GOA is 256, the numbers fishing near the waters that may be opened under Alternative 5 is smaller. Table 4 in this EA/RIR/IRFA presented counts of vessels fishing within the State of Alaska management areas within which Caton Island and Cape Barnabas are located, counts of vessels fishing within Alaska waters within those management areas, and counts of the vessels fishing within the State of Alaska statistical reporting areas within which the two haulouts and their closed waters were located. These are three different approaches to defining the numbers of entities that may be affected by the alternatives. The numbers reported here are those estimated to be fishing within the Alaska statistical reporting areas within which the haulouts were located.

4.9 Adverse economic impacts on small entities

Aleutian Islands pollock Alternative 2 may adversely impact a total of 12 "small entities", six catcher vessels and six CDQ groups in comparison with the "status quo/baseline/no action" Alternative 1. However, at its greatest, the Aleutian TAC would be very small compared to the Eastern Bering Sea TAC. Moreover, provisions of Alternative 1 which preclude fishing within critical habitat may result in the fleet being unable to harvest a large part of the TAC even if it is available. Therefore, it seems likely that the attributable adverse impact of adopting Alternative 2, as compared to the baseline case, would be small.

¹⁹For one thing, the determination in the NMFS tables is based on groundfish revenues only. These vessels may well have revenues from other Alaskan fisheries. In this case, given the use of pot gear, these vessels may have revenues from shellfish fisheries. The tables are known to be subject to other shortcomings as well. They do not take account of revenues that may have been earned in fisheries outside of Alaska and they do not take account of affiliations that may exist between vessels, or between vessels and processors.

²⁰Because revenues from other fisheries, or the impact of affiliations, are not accounted for.

Aleutian Islands pollock Alternative 3 has no adverse impacts on small entities in comparison with the "status quo/baseline/no action" Alternative 1. Alternative 3 lifts seasonal restrictions on trawl fishing for pollock in the Aleutian Islands and is expected to result in the pollock harvest being taken during the high valued winter fishery.

The Caton Island/Cape Barnabas Alternative 5 has no adverse impacts on small entities in comparison with "status quo/baseline/no action" Alternative 4. Alternative 5 lifts restrictions on fishing with pots for Pacific cod and provides small entities somewhat more flexibility. It is not clear if lifting the restrictions will increase revenues or reduce costs for these operations significantly. These operations have other inshore areas nearby - including within the same State of Alaska statistical reporting areas - within which they could fish. The volumes of fish taken from these areas in the past are modest compared to overall harvests from other Alaska inshore waters in those areas.

4.10 Recordkeeping and reporting requirements

The IRFA should include "a description of the projected reporting, record keeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record..."

This regulation does not impose new recordkeeping or reporting requirements on the regulated small entities.

4.11 Federal rules that may duplicate, overlap, or conflict with proposed action

An IRFA should include "An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule..."

This analysis did not reveal any Federal rules that duplicate, overlap or conflict with the proposed action.

4.12 Description of significant alternatives

An IRFA should include "A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities."

The EA/RIR/IRFA analyzed two options that would be less burdensome for directly regulated small entities in the Aleutian Island pollock fishery. Under Alternative 3 the seasonal restriction on harvests from the pollock fishery would be lifted, and it is likely that almost all of the harvest would be taken in the first half of the year, and probably in February and March when the roe quality is highest. While this would increase the value of the TAC for the industry, it would increase the concentration of the fishery in time. This may impose important costs if it jeopardizes the continued survival of the western DPS of Steller sea lions, or adversely modifies its critical habitat. As noted in Section 2.8 of this EA/RIR/IRFA,

"Alternative 3 could increase the intensity of the impacts associated with an Aleutian

Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA ... if any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA "

Alternative 5 might be less burdensome for some small Pacific cod pot fishing vessels in the Gulf of Alaska. These would have somewhat more area to fish in during the State parallel fishery.

5.0 REFERENCES

- Alaska Department of Commerce and Economic Development. (2001) "Western Alaska Community Development Quota Handbook." Juneau: May 29, 2001.
- Hiatt, Terry, Ron Felthoven and Joe Terry. (2001) "Stock Assessment and Fishery Evaluation Report for the Groundfish Fisheries of the Gulf of Alaska and Bering Sea/Aleutian Island Area: Economic Status of the Groundfish Fisheries off Alaska, 2000." Socioeconomic Assessments Program. Resource Ecology and Fisheries Management Division, Alaska Fisheries Science Center, NMFS. Seattle: November, 2001.
- Ianelli, James N., Troy Buckly, Taina Honkolehto, Gary Walters, and Neal Williamson. 2001. "Eastern Bering Sesa Walleye Pollock Stock Assessment." SAFE report. November 20, 2001.
- Jackson, David R. and Michael P. Ruccio. 2001. "Annual Management Report for the Kodiak, Chignik, and South Alaska Peninsula Area Groundfish Fisheries, 2000." Alaska Department of Fish and Game, Division of Commercial Fisheries. Regional Information Report No 4K01-44. Kodiak: September 2001.
- NMFS. (1998a). Section 7 consultation on the authorization of the Bering Sea and Aleutian Islands groundfish fishery for walleye pollock under the BSAI FMP, on the authorization of the Bering Sea and Aleutian Islands Atka mackerel fishery under the BSAI FMP, and the authorization of the Gulf of Alaska groundfish fishery for walleye pollock under the GOA FMP, between 1999 and 2002. Office of Protected Resources, NMFS. December 3, 1998.
- NMFS. (1998b). Revised reasonable and prudent alternative for the 1998 biological opinion on NMFS' authorization of a pollock fishery under the Bering Sea-Aleutian Island groundfish Fishery Management Plan, and authorization of a pollock fishery under the Gulf of Alaska groundfish Fishery Management Plan.
- NMFS. (1999). "Draft for Secretarial Review. Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for The Extension of an Emergency Rule to Implement Reasonable and Prudent Steller Sea Lion Protection Measures in the Pollock Fisheries of the Bering Sea and Aleutian Islands Area and the Gulf of Alaska." DOC, NOAA, National Marine Fisheries Service, AK Region. P.O. Box 21668, Juneau, AK 99802-1668. June 25, 1999.
- NMFS. (2000). "Endangered Species Act Section 7 Initiation of Consultation Biological Opinion and Incidental Take Statement: Authorization of Groundfish Fisheries Conducted under the Bering Sea and Aleutian Islands and Gulf of Alaska Fishery Management Plans of the North Pacific Fishery Management Council.", November 30, 200, NMFS AK Region. P.O. Box 21668, Juneau, AK 99802-1668. p. 352.
- NMFS. (2001a). Steller Sea Lion Protection Measures Final Supplemental Environmental Impact Statement. November 2001. DOC, NOAA, National Marine Fisheries Service, AK Region, P.O. Box 21668, Juneau, AK 99802-1668.

- NMFS. (2001b). Alaska Groundfish Fisheries Draft Programmatic Supplemental Environmental Impact Statement. January 2001. DOC, NOAA, National Marine Fisheries Service, AK Region, P.O. Box 21668, Juneau, AK 99802-1668. pp. Volumes I-VIII approx 3300.
- NMFS. (2001c). Draft Steller sea lion protection measures supplemental environmental impact statement. October 2001. DOC, NOAA, National Marine Fisheries Service, AK Region, P.O. Box 21668, Juneau, AK 99802-1668.
- NMFS. (2002). Final Environmental Impact Statement for American Fisheries Act Amendments 61/61/13/8. February 2002. DOC, NOAA, National Marine Fisheries Service, AK Region, P.O. Box 21668, Juneau, AK 99802-1668.
- Payne, P. Michael. 2001. Memo from P. Michael Payne, NMFS Assistant Regional Administrator (Alaska Region) for Protected Resources, to Susan Salveson, NMFS Assistant Regional Administrator (Alaska Region) for Sustainable Fisheries, on "Endangered Species Act (ESA) Informal Consultation for the Alaska Pollock, Atka Mackerel, and Pacific cod fisheries under Fishery Management Plans (FMPS) for the groundfish Fisheries of the Bering Sea and Aleutian Islands Area and Gulf of Alaska." Dated December 11, 2001.
- Ruccio, Michael P. 2002. Alaska Department of Fish and Game, Kodiak. Personal communication. March 8, 2002.
- USFWS. (2001). Endangered Species Act Formal Consultation for the 2001-2004 Total Allowable Catch Specifications for the Gulf of Alaska and Bering Sea/Aleutian Island Groundfish Fisheries. Letter from Ann G. Rappoport to James W. Balsiger. 1011 E. Tudor Road, Suite 219, Anchorage, AK 99503. FWS Log No. WAES-01016.

6.0 AUTHORS

Dr. Ben Muse, Sue Salveson, and Melanie Brown National Marine Fisheries Service - Alaska Region Sustainable Fisheries Division P.O. Box 21668 Juneau, Alaska 99802

7.0 CONSULTANTS AND CONTRIBUTORS

Kent Lind, Dr. Lewis Queirolo, David Ackley, Shane Capron, and Tamra Faris National Marine Fisheries Service, Alaska Region

Michael P. Ruccio Alaska Department of Fish and Game, Kodiak APPENDIX 1 The Council's recommended Steller sea lion protection measures

Applicable to all fisheries:

No transit zones around 37 rookeries and no groundfish fishing within 3 nm of 39 rookeries.

Applicable to all pollock, cod, and mackerel fisheries:

- (6) A modified harvest control rule would be applied. If the spawning biomass of pollock, Pacific cod, or Atka mackerel in the BSAI or GOA is estimated to be less than 20% of the projected unfished biomass, directed fishing for that species would be prohibited. The TAC would be limited to amounts needed for bycatch in other fisheries. Essentially, the ABC control rule would remain unchanged, but the regulations would specify that should biomass fall below B_{20%} for one of these species, then directed fishing for that species in the relevant management area would be prohibited.
- (7) The Seguam Pass foraging area, Area 9 (Bogoslof) and Area 4 (Chignik), would be closed to all gear types fishing for pollock, Pacific cod, and Atka mackerel. The Area 4 (Chignik) restriction does not apply to vessels using jig gear.
- (8) No pollock, Pacific cod, or Atka mackerel fishing within 0-20 nm of the 5 northern haulouts in the Bering Sea, except jig gear. These include the Round (Walrus Islands), Cape Newenham, Hall Island, St Lawrence SW Cape, and St. Lawrence Island, South Punuk Island haulouts.
- (9) The 19 additional "RPA" haulouts would be treated consistently with CH haulouts for the purpose of these regulatory changes affecting the pollock, Pacific cod, and Atka mackerel fisheries.
- (10) Participants in the pollock, Pacific cod, or Atka mackerel directed fisheries must register with NMFS and have an operable vessel monitoring system.

Applicable to AI pollock fisheries:

Closure of the Aleutian Islands to directed pollock fishing West of 170 West Longitude.

Applicable to BSAI cod fisheries:

1. Establish seasons and TAC apportionments by gear type:

trawl: January 20 to April 1 (60%), April 1 to June 10 (20%), June 10 through

October 31 (20%)

trawl CV January 20 to April 1 (70%), April 1 to June 10 (10%), June 10 through

October 31 (20%)

trawl CP January 20 to April 1 (50%), April 1 to June 10 (30%), June 10 through

October 31 (20%)

hook-and-line, jig: January 1 to June 10 (60%), June 10 through December 31 (40%) pot: January 1 to June 10 (60%), September 1 through December 31 (40%)

pot CDQ January 1 through December 31

pot or H&L < 60 ft LOA January 1 to December 31

[Note: the harvest of cod by the <60' pot and hook-and-line vessels accounts towards the 1.4% quota when the season for vessels >=60' using pot or hook-and-line gear is closed. At other times it counts to the 18.3% or 0.3% quotas as appropriate.]

- 2. Pacific cod rollover in the BSAI: Unharvested cod TAC can be rolled over from one season to the next, consistent with bycatch consideration objectives of optimizing catch by gear groups and sectors.
- 3. Roll over the seasonal apportionments of TAC so as to maximize the opportunities for Pacific cod harvests by the trawl sector. Cod rollovers within the trawl sector would occur within a season prior to allocating to other gear types. Such rollovers would continue into subsequent seasons, but may be reallocated if one sector is unable to reach its TAC.
- 4. Establish area restrictions based on gear type:

In the Aleutian Islands

Hook-and-line and Pot: No fishing in critical habitat east of 173° West to western boundary of

Area 9, 0-10 nm closures at Buldir, 0-20 nm closure at Agligadak.

Trawl: East of 178° West longitude: 0-10 nm closures around rookeries, except

0-20 nm at Agligadak; 0-3 nm closures around haulouts.

Trawl West of 178° West longitude: 0-20 nm closures around haulouts and

rookeries until the Atka mackerel fishery inside the harvest limit area (HLA) A or B season, respectively, is completed, at which time trawling for cod can occur outside 3 nm of haulouts and 10 nm of rookeries

within the HLA.

In the Bering Sea:

0-3 nm closures around all rookeries and haulouts (except with jig gear around haulouts).

0-10 nm closures around all rookeries and haulouts for trawl gear (except the Pribilof haulouts that would be closed 0-3 nm).

0-7 nm closure around Amak rookeries for hook-and-line and pot gear.

0-10 nm closure around Bishop Point and Reef Lava haulouts in Area 8 for vessels >= 60 ft using hook-and-line gear.

Bering Sea Pacific cod exemption area. A fishing zone for Pacific cod in the Dutch Harbor area (area 9) for jig, and hook-and-line catcher vessels less than 60 ft. This fishing zone would encompass all waters of the Bering Sea south of the line connecting the point 3 nm north of Bishop Point to Cape Tanak. This would include a 10 nm radius closure around the Bishop Pt haulout in Area 9. This area would fish under a 250,000 lbs. Pacific cod harvest cap.

Applicable to BSAI Atka mackerel fisheries:

- 1. Establish two seasons and TAC apportionments: January 20 April 15 (50%), September 1 November 1 (50%). For the CDQ fisheries, CDQ Atka mackerel fishing would occur during a single season.
- 2. TAC would be further apportioned inside and outside of the HLA (critical habitat and RPA sites), with 60% inside and 40% outside.
- 3. During each season, fishing would begin first in Area 541. Fishing would begin in Areas 542 and 543 48 hours following the closure of Area 541.
- 4. A system of grouping vessels for critical habitat fishing would be implemented for Areas 542 and 543 in each season.

Vessels wishing to fish in the HLA would register with NMFS to fish in Area 542, in Area 543, or in both Areas 542 and 543. The vessels registering to fish in an area would be assigned to the "group" for that area. There would be an Area 542 group and an Area 543 group. Vessels registering for both areas would be placed in both groups.

Two directed fisheries would be defined for each area. Directed fisheries in an area would take place in sequence with defined start and stop dates; directed fisheries could last no longer than 14 days.

Half of the vessels in each group would be assigned (at random) to a "platoon" to participate in each of the directed fisheries (although one platoon would have one more vessel than the other if there were an odd number of vessels in the group). A vessel wishing to fish in the HLA in Area 542 and Area 543 would be first assigned to an Area 542 platoon at random. That vessel would then be automatically assigned to a platoon in Area 543 that participated in a directed fishery taking place at a different time. Thus a vessel in the 542 and 543 groups that was assigned, at random, to the platoon for the first directed fishery in Area 542 would automatically be in the platoon for the second directed fishery in Area 543. If the vessel had been randomly assigned to the platoon for the second directed fishery in Area 542, it would be in the platoon for the first directed fishery in Area 543.

Once registered for an HLA directed fishery in a season, vessels would be prohibited from fishing in any other fishery until the first assigned HLA fishery is closed. If they have registered for both areas, this applies only to the first directed fishery to which they are assigned.

The HLA limit (60% of the annual TAC) for the area is divided between the platoons in proportion to the number of vessels in the platoon compared to the number of vessels in the area group. Directed fisheries close when the TAC limit to the fishery has been reached or the closure date is reached.

The platoon system does not extend to waters outside of the HLA. These waters remain

- open to the operations of vessels in either platoon or vessels that are not in either platoon.
- 5. No directed fishing for Atka mackerel in critical habitat east of 178° West longitude (including critical habitat in the Bering Sea management area and excluding the Steller sea lion conservation area (SCA)).
- 6. 0-10 nm closures around rookeries west of 178° West longitude, and 0-15 nm at Buldir.
- 7. 0-3 nm closures around haulouts (except with jig gear).
- 8. Two observers are required for each vessel fishing in the HLA.

Applicable to Bering Sea pollock fisheries:

- 1. Establish seasons and TAC apportionments: January 20 to June 10 (40%), June 10 to November 1 (60%).
- 2. No fishing for pollock during the A season within an area north of Alaska peninsula and Aleutian Islands chain approximately 10 nm from shore, based on a series of straight lines that are tangent to haulouts in the area. (Bering Sea Pollock Restriction Area (BSPRA))
- 3. 0-10 nm closures around all rookeries and haulouts (except the Pribilof haulouts that would be closed 0-3nm).
- 4. The 'Catcher Vessel Operational Area' would be closed to trawl catcher/processors during the B season (June 10 to November 1).
- 5. A limit on the amount of pollock taken within the SCA would be established at no more than 28% of the annual pollock directed fishing allowance (PDFA) prior to April 1 each year. The remaining portion of TAC available prior to June 10, or 12% of the annual PDFA, may be harvested outside of the SCA before April 1 or inside SCA after April 1. If the 28% was not taken in the SCA prior to April 1, the remainder is available to be taken inside after April 1. The SCA harvest limits would be allocated to sectors proportionately, so that each sector can harvest no more than 28% of its allocation prior to April 1 in the SCA.
- 6. Set aside such A season pollock quota in the SCA as needed for vessels < 99 feet LOA to harvest their full A season pollock quota in the SCA during the period from January 20th through March 31.
- 7. Catcher vessel exclusive fishing seasons for Bering Sea and GOA pollock would continue so that catcher vessels are prohibited from participating in directed fishing for pollock under the following conditions. Vessels less than 125 ft (38.1 m) LOA are exempt from this restriction when fishing east of 157°00' W. long.

If you own or operate a catcher vessel and engage in directed fishing for pollock in the	During the	Then you are prohibited from using that vessel for subsequently engaging in directed fishing for pollock in the
Bering Sea subarea	A season (1/20 - 6/10)	GOA until the following C season (8/25)
	B season (6/10 - 11/1)	GOA until the A season of the next year (1/20)
GOA	A season (1/20 - 2/25)	BS until the following B season (6/10)
	B season (3/10 - 5/31)	BS until the following B season (6/10)
	C season (8/25 - 9/15)	BS until the A season of the following year (1/20)
	D season (10/1 - 11/1)	BS until the A season of the following year
		(1/20)

Applicable to Gulf of Alaska pollock fisheries:

1. Establish seasons and TAC apportionments:

A season = January 20 to February 25 (25%)

B season = March 10 to May 31 (25%)

C season = August 25 to September 15 (25%)

D season = October 1 to November 1 (25%)

[Note: Rollovers of TAC apportionment are allowed, provided that no rollover is more than 30% of annual TAC for an individual management area.]

- 2. Catcher vessels would continue to be prohibited from retaining on board, at any time during a trip, more than 300,000 pounds (136 mt) of unprocessed pollock. Tender vessels would continue to be prohibited from (i) operating as a tender vessel east of 157° W. longitude and (ii) operating as a tender vessel west of 157° W longitude while retaining on board at any time more than 600,000 pounds (272 mt) of unprocessed pollock.
- 3. Catcher vessel exclusive fishing seasons for BS and GOA pollock would continue (see Bering Sea pollock fisheries).
- 4. No directed pollock fishing in the areas listed:

Area 1: 0-20 nm from all rookeries and haulouts, except 0-10 nm around Middleton Island

Area 2: 0-10 nm from all haulouts. 0-20 nm closures at Pye Island and Sugarloaf

rookeries. 0-15 nm closures at Marmot Island in the first half of the year, and 0-20 nm in the second half of the year.

Area 3: 0-10 nm from all rookeries and haulouts except 0-3 nm at Cape Barnabas and Cape Ikolik. 0-10 nm closures at Gull Point and Ugak Island during the first half of the year and 0-3 nm during the second half of the year.

Area 4: 0-20 nm from all haulouts and rookeries.

Area 5: 0-20 nm from all rookeries and haulouts, except 0-3 nm at Mitrofania, Spitz, Whaleback, Sea Lion Rocks, Mountain Point, and Castle Rock..

Area 6: 0-10 nm from all rookeries and haulouts, except 0-3 nm at Caton and the Pinnacles.

Areas 10 and 11: 0-20 nm from all rookeries and haulouts

Applicable to Gulf of Alaska cod fisheries:

1. Establish seasons and TAC apportionments:

A-season = 60% of TAC: January 1 hook-and-line, pot, or jig, January 20 trawl, until June 10, at which time directed fishing for Pacific cod by all gear would be prohibited until September 1.

B-season = 40% of TAC: September 1 all gear types to November 1 for trawl gear and December 31 for nontrawl gear. Pacific cod bycatch taken between June 10 and August 31 will be subtracted from the B season apportionment.

2. No <u>trawling</u> for cod in the areas listed:

Area 1: 0-20 nm from all rookeries and haulouts, except 0-10 nm around Middleton Island.

Area 2: 0-10 nm from all haulouts. 0-20 nm closures at Pye Island and Sugarloaf rookeries. 0-15 nm closures at Marmot Island in the first half of the year, and 0-20 nm in the second half of the year.

Area 3: 0-10 nm from all rookeries and haulouts except 0-3 nm at Cape Barnabas and Cape Ikolik. 0-10 nm closures at Gull Point and Ugak Island during the first half of the year and 0-3 nm during the second half of the year.

Area 4: 0-20 nm from all haulouts and rookeries.

Area 5: 0-20 nm from all rookeries and haulouts, except 0-3 nm at Mitrofania, Spitz, Whaleback, Sea Lion Rocks, Mountain Point, and Castle Rock.

Area 6: 0-10 nm from all rookeries and haulouts, except 0-3 nm at Caton and the Pinnacles.

Areas 10 and 11: 0-20 nm from all rookeries and haulouts.

- 3. No jig gear fishing from 0-3 nm of all rookeries.
- 4. No directed fishing for cod with <u>pot or hook-and-line gear</u> in the areas listed.

Area 1: 0-3 nm from all rookeries.

Area 2: 0-10 nm closures at Pye Island, Sugarloaf, and Marmot.

Area 3: 0-3 nm around Cape Barnabas and Cape Ikolik haulouts.

Area 4: 0-20 nm from all haulouts and rookeries.

Area 5: 0-3 nm from all rookeries and Mitrofania, Spitz, Whaleback, Sea Lion Rocks,

Mountain Point, and Castle Rock haulouts.

Area 6: 0-3 nm at Caton and the Pinnacles.

Areas 10 and 11: 0-20 nm from all rookeries and haulouts for pot gear; 0-10 nm from all

rookeries and haulouts for hook-and-line gear.

APPENDIX 2 ESA listed and candidate species that range into the BSAI or GOA groundfish management areas and whether Reinitiation of Section 7 Consultation is occurring

Common Name	Scientific Name	ESA Status	Whether Reinitiation of ESA Consultation is occurring
Blue Whale	Balaenoptera musculus	Endangered	No
Bowhead Whale	Balaena mysticetus	Endangered	No
Fin Whale	Balaenoptera physalus	Endangered	No
Humpback Whale	Megaptera novaeangliae	Endangered	No
Right Whale	Balaena glacialis	Endangered	No
Sei Whale	Balaenoptera borealis	Endangered	No
Sperm Whale	Physeter macrocephalus	Endangered	No
Steller Sea Lion (WesternPopulation)	Eumetopias jubatus	Endangered	No - unless Alternative 3 chosen
Steller Sea Lion (Eastern Population)	Eumetopias jubatus	Threatened	No
Chinook Salmon (Puget Sound)	Oncorhynchus tshawytscha	Threatened	No
Chinook Salmon (Lower Columbia R.)	Oncorhynchus tshawytscha	Threatened	No
Chinook Salmon (Upper Columbia R. Spring)	Oncorhynchus tshawytscha	Endangered	No
Chinook Salmon (Upper Willamette .)	Oncorhynchus tshawytscha	Threatened	No
Chinook Salmon (Snake River Spring/Summer)	Oncorhynchus tshawytscha	Threatened	No
Chinook Salmon (Snake River Fall)	Oncorhynchus tshawytscha	Threatened	No
Sockeye Salmon (Snake River)	Oncorhynchus nerka	Endangered	No
Steelhead (Upper Columbia River)	Onchorynchus mykiss	Endangered	No
Steelhead (Middle Columbia River)	Onchorynchus mykiss	Threatened	No
Steelhead (Lower Columbia River)	Onchorynchus mykiss	Threatened	No
Steelhead (Upper Willamette River)	Onchorynchus mykiss	Threatened	No
Steelhead (Snake River Basin)	Onchorynchus mykiss	Threatened	No
Steller's Eider ¹	Polysticta stelleri	Threatened	Ongoing
Short-tailed Albatross ¹	Phoebaotria albatrus	Endangered	Ongoing
Spectacled Eider ¹	Somateria fishcheri	Threatened	Ongoing
Northern Sea Otter ¹	Enhydra lutris	Candidate	No

¹The Steller's eider, short-tailed albatross, spectacled eider, and Northern sea otter are species under the jurisdiction of the U.S. Fish and Wildlife Service. For the bird species, critical habitat has been proposed only for the Steller's eider (65 FR 13262). The northern sea otter has been proposed by USFWS as a candidate species (November 9, 2000; 65 FR 67343).

 $\label{lem:composition} C:\Documents\ and\ Settings\ \ in\ progress\ \ Trailing\ Amend.\ EA.\ 5.8.02. final. wpd\ File\ created\ 2-19-02\ bmuse$

EA and RIR/IRFA combined by ssalveson 3-5-02

Sent to Council 3-13-02

scapron: 4/25/02 mnbrown:4/26/02 ssalveson:5/8/02